

Figure 1

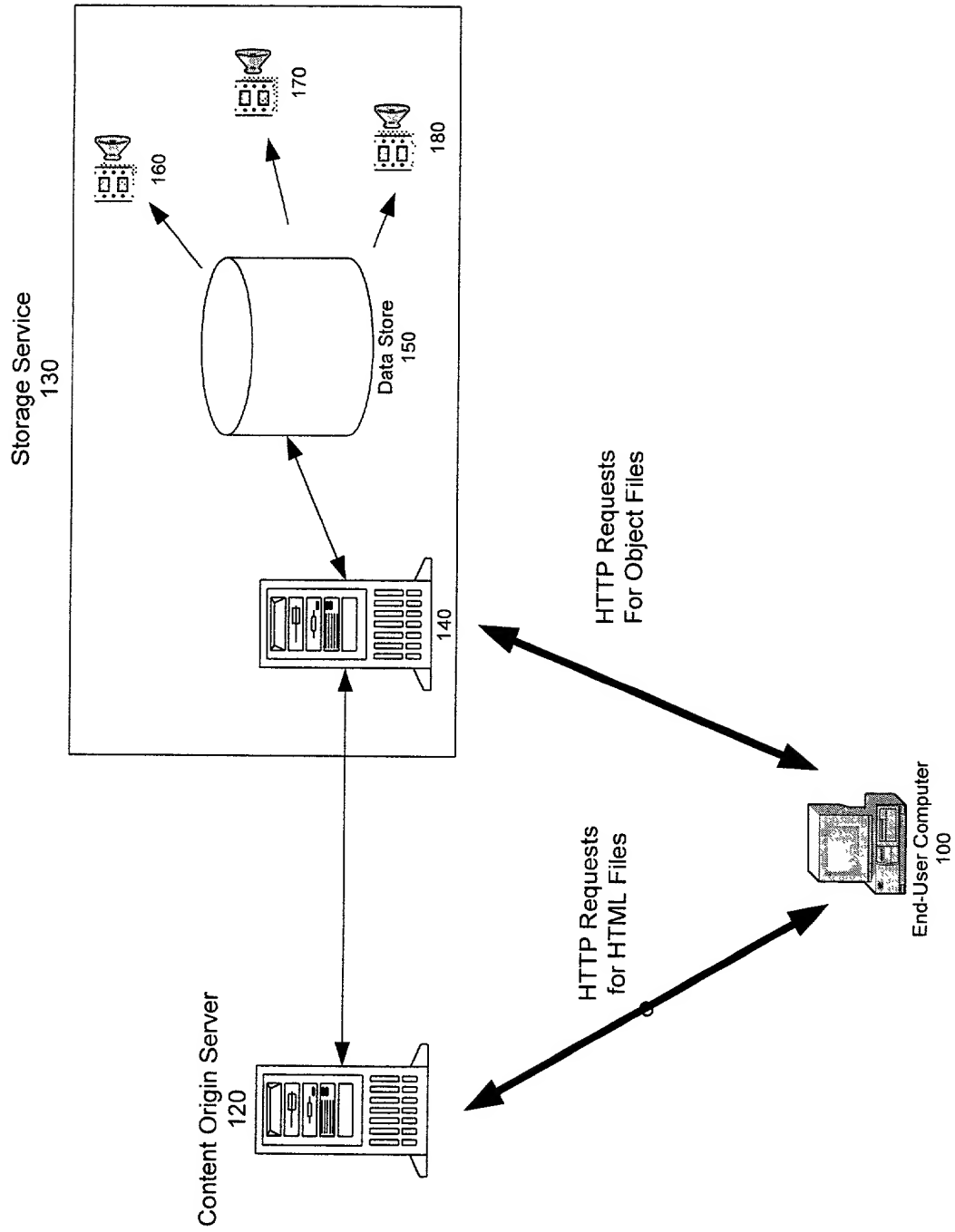
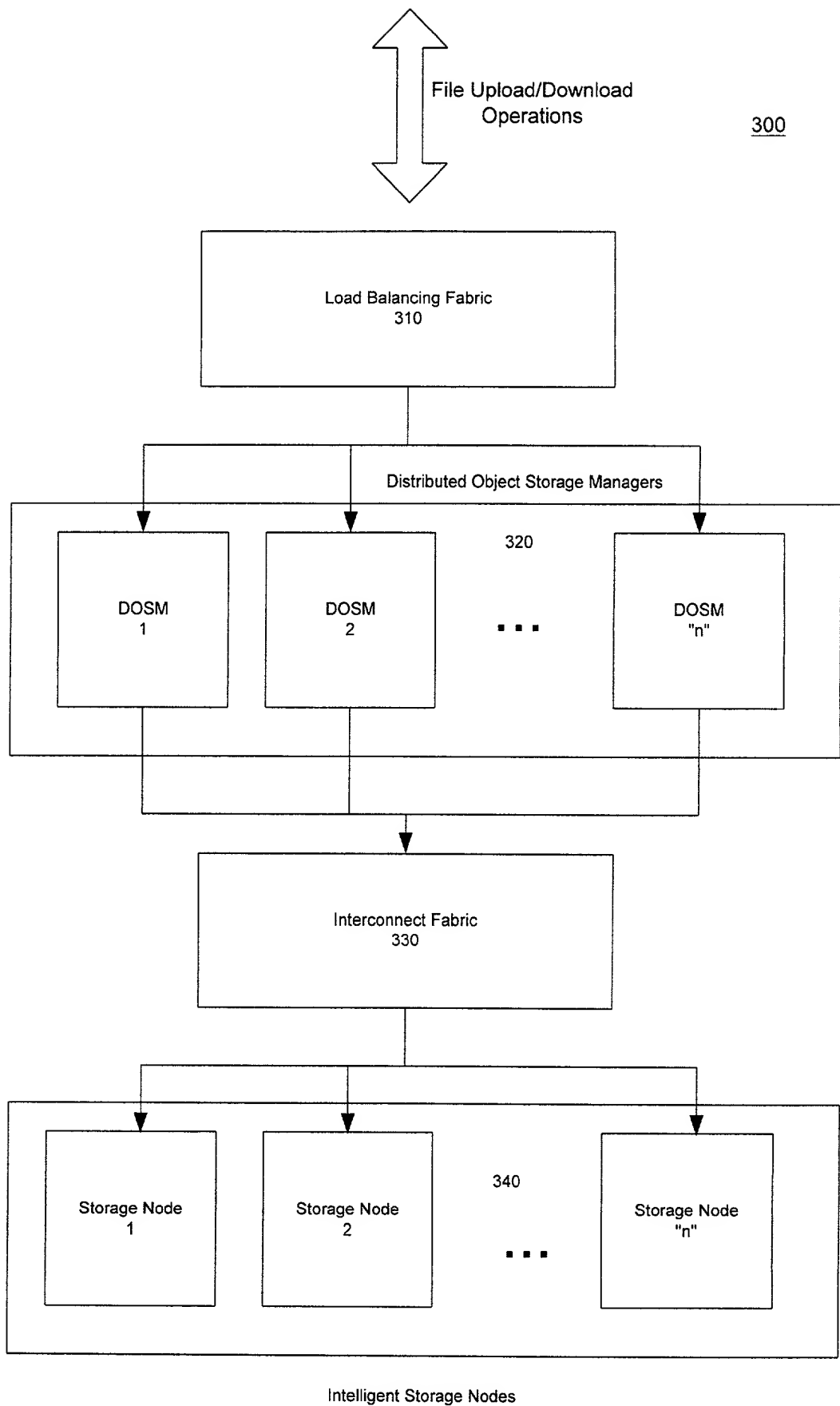
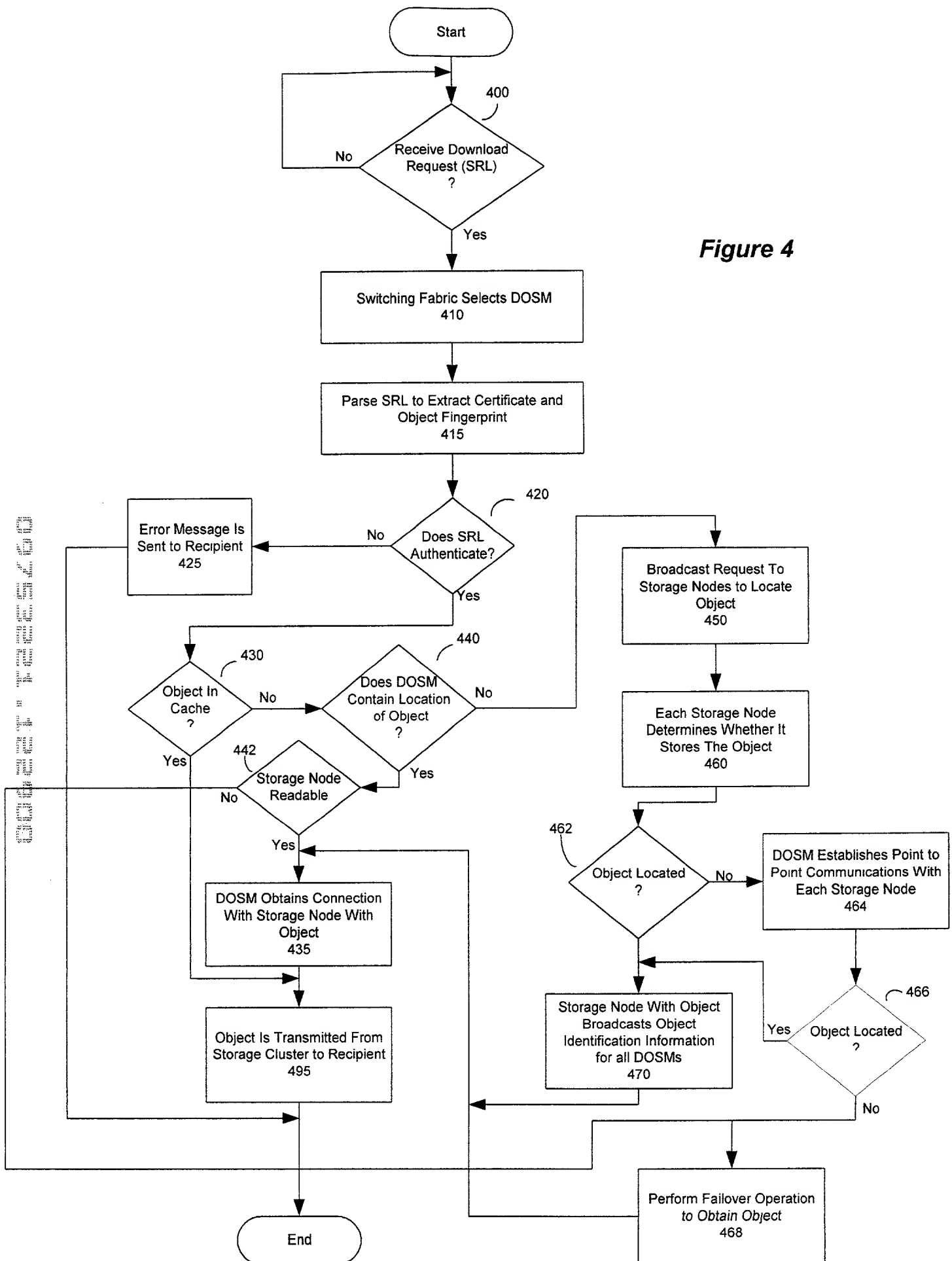


Figure 2

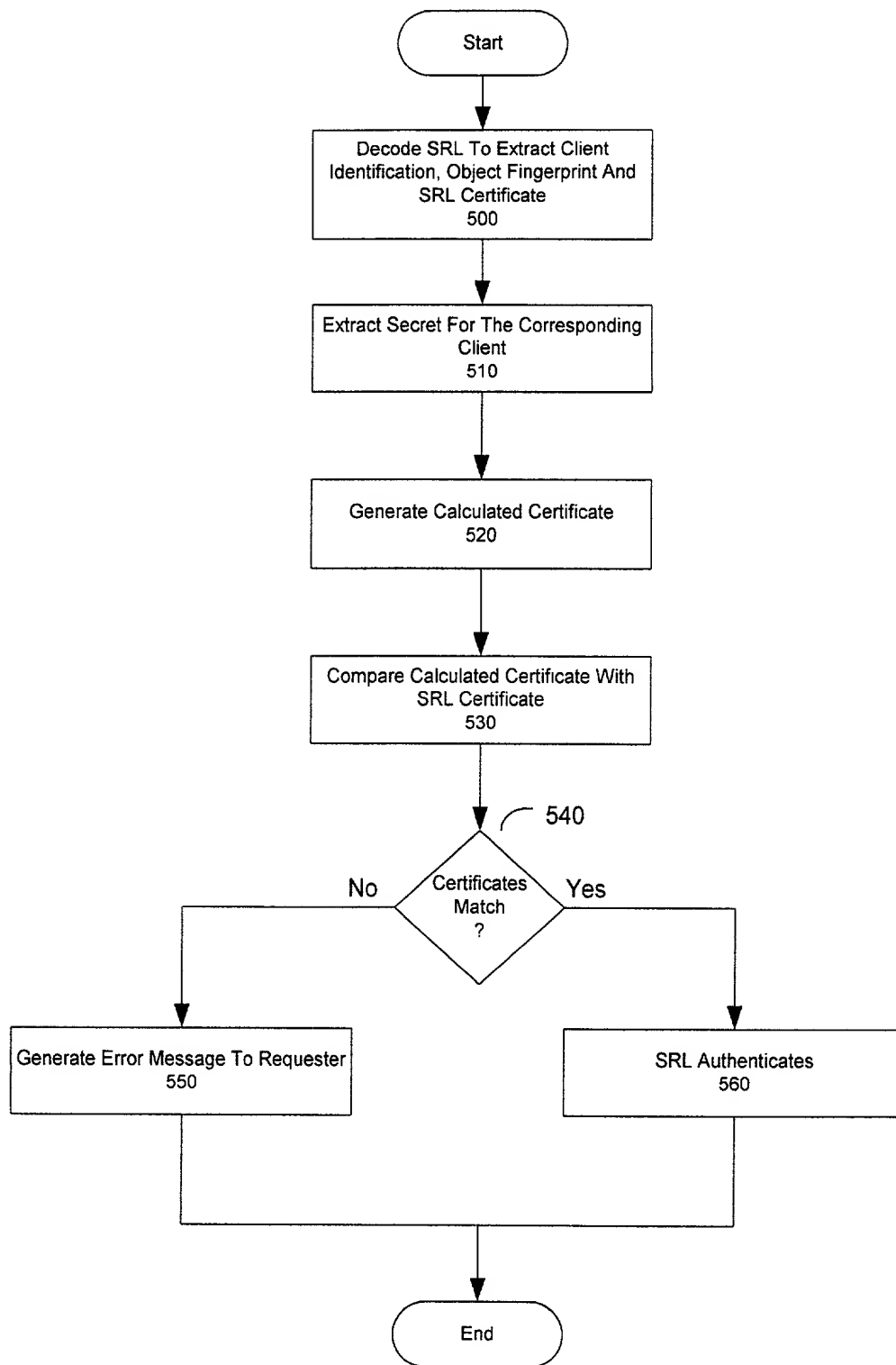
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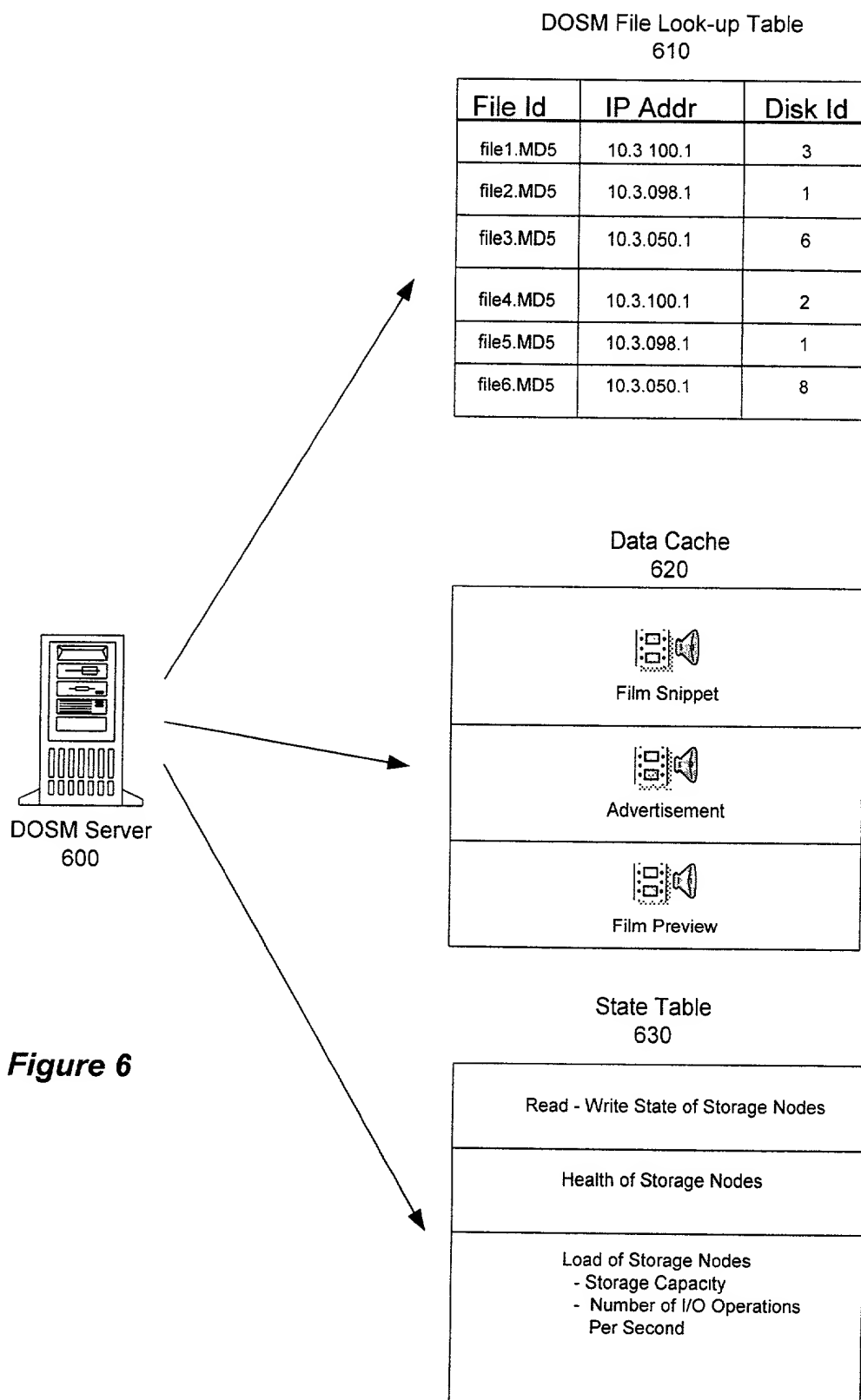
**Figure 3**



**Figure 4**



**Figure 5**



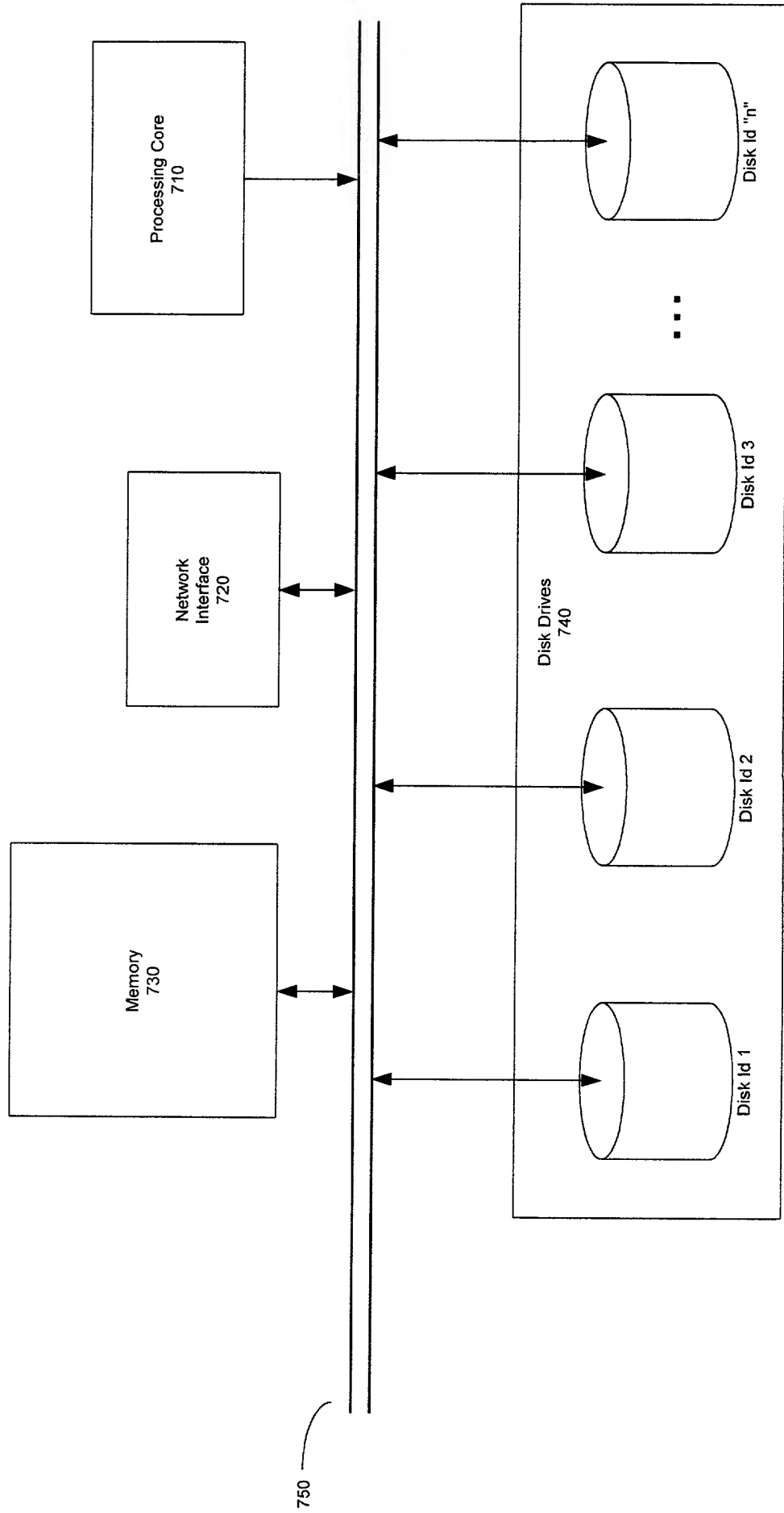
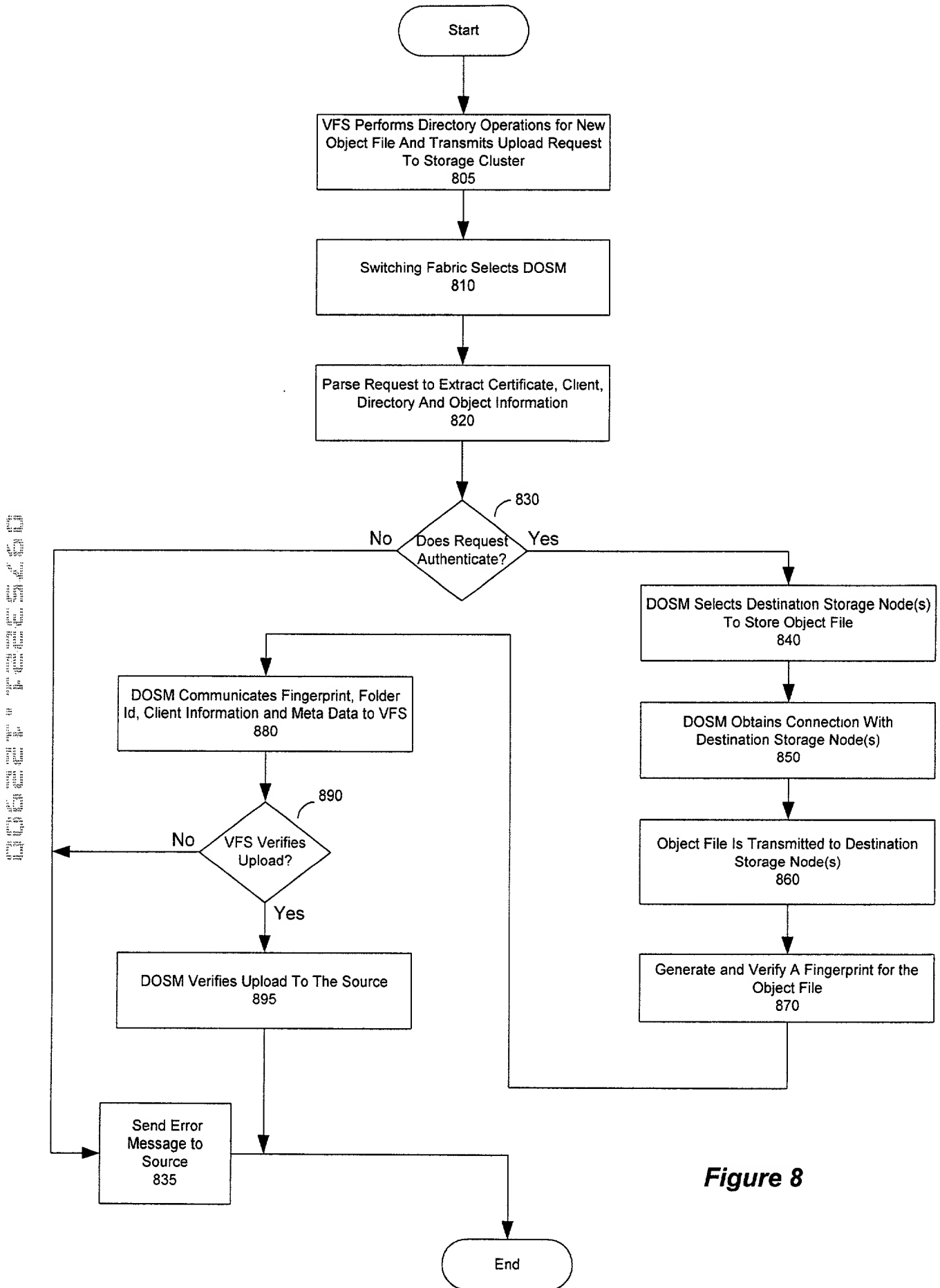
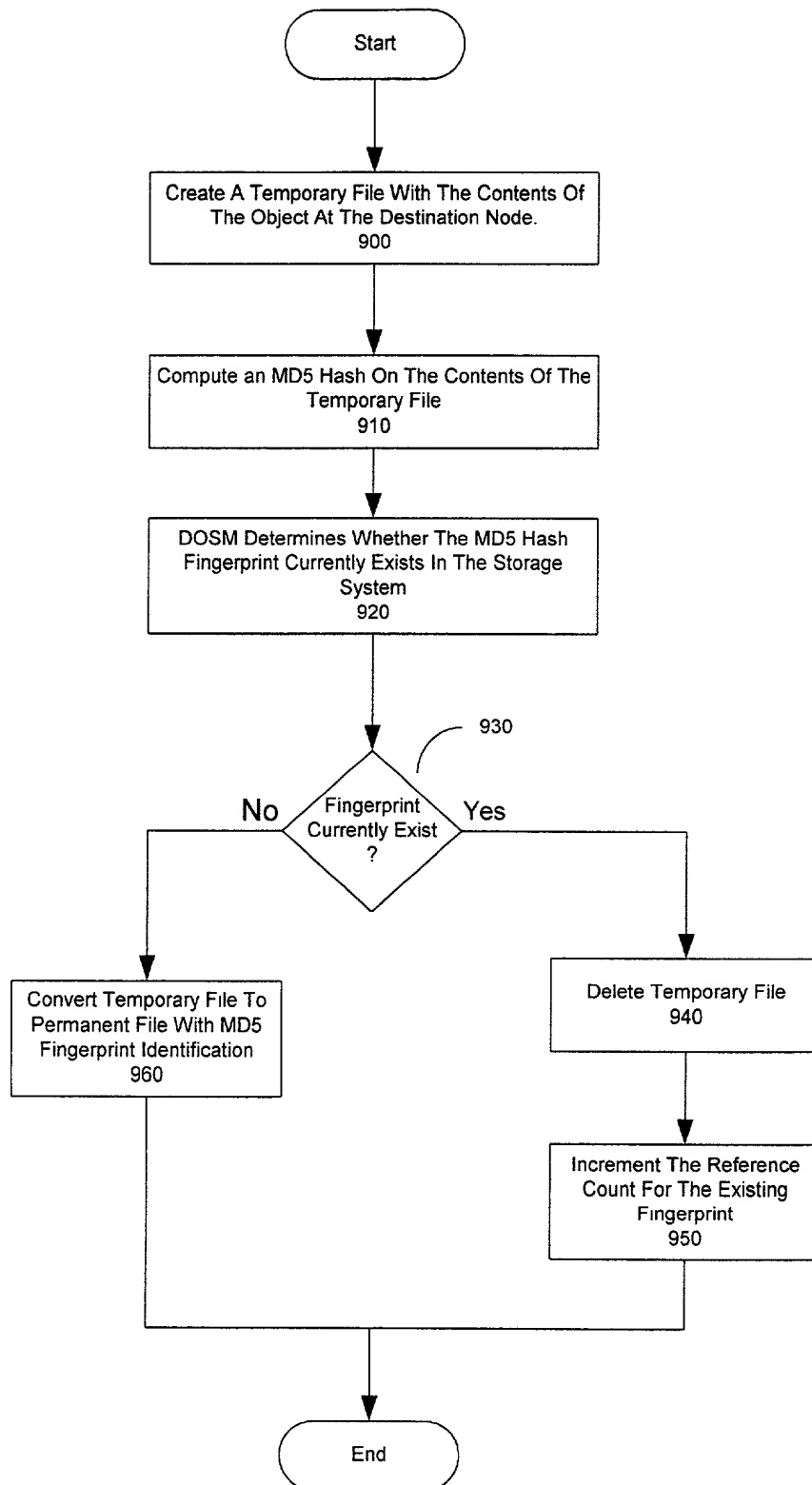


Figure 7

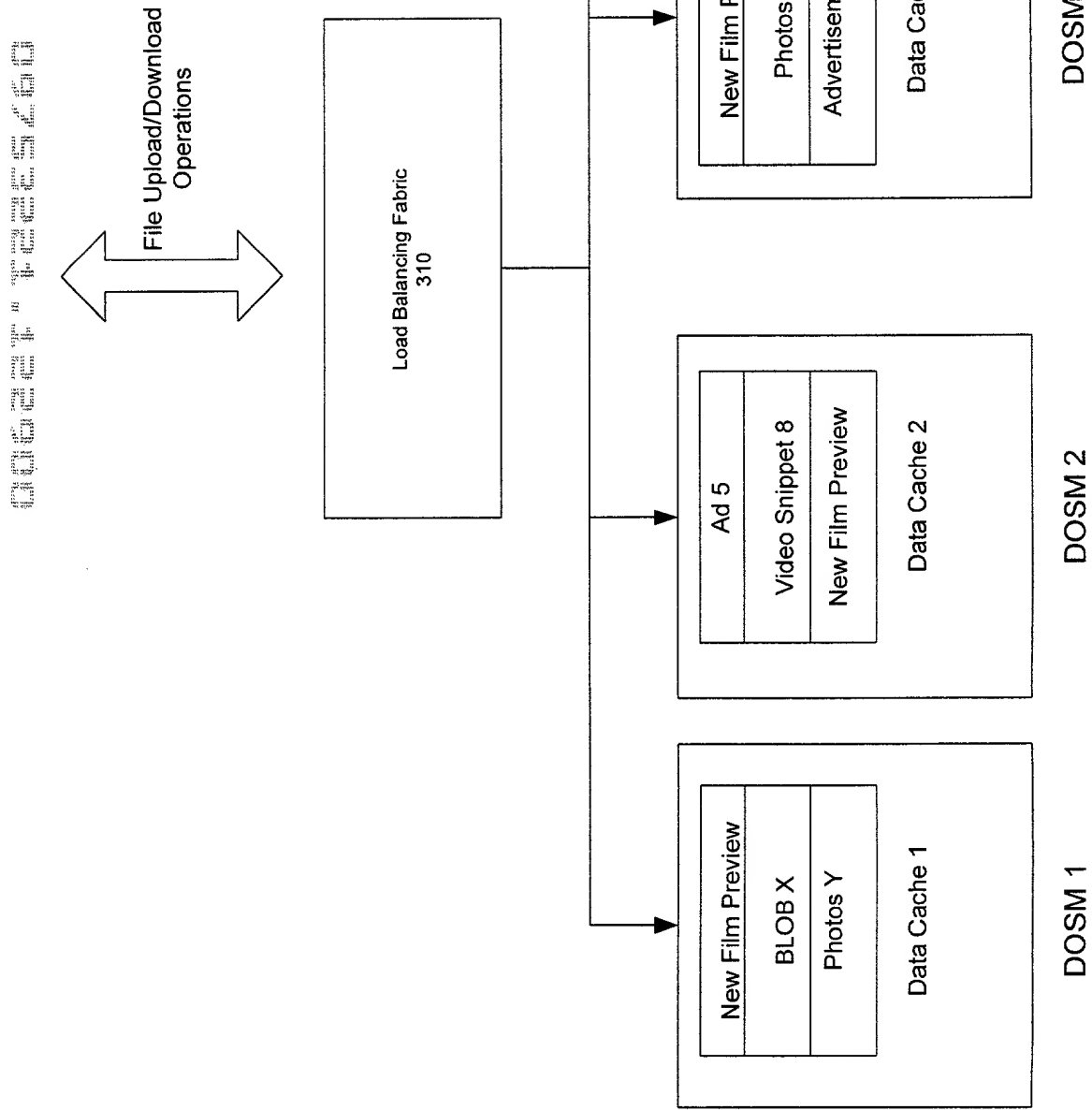


**Figure 8**

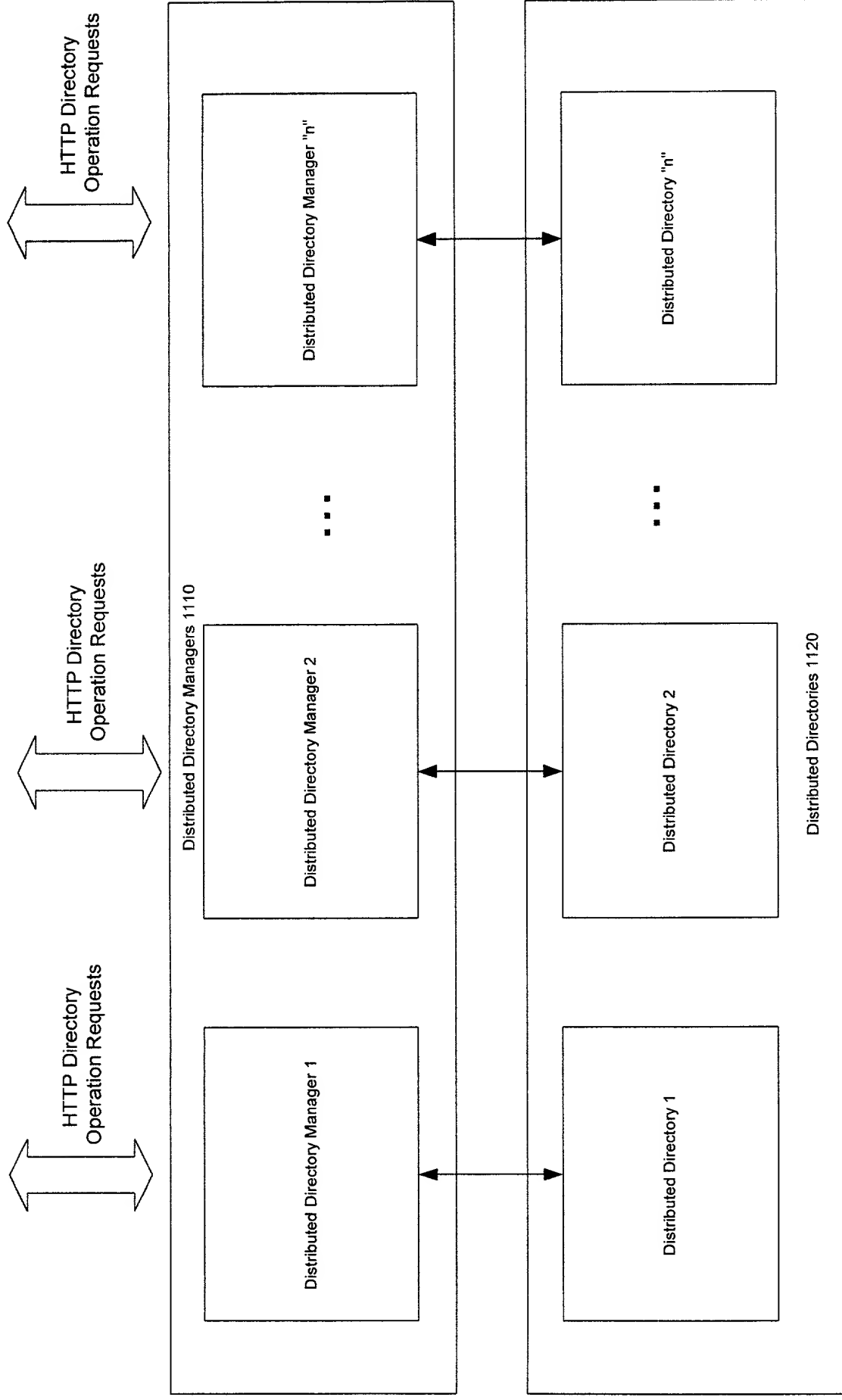




**Figure 9**



### Figure 10



**Figure 11**

Customer Table

	Customer Name	Customer Reserved Fields
	Customer A	[Customer stores data ...]
	Customer B	[Customer stores data ...]
	Customer C	[Customer stores data ...]
	Customer D	[Customer stores data ...]

1200

Folder Table

Customer Id	Folder Id	Folder Parent Id	Metadata
3	2	-	[Reserved]
3	100	2	[Reserved]
3	251	2	[Reserved]
3	166	251	[Reserved]

1210

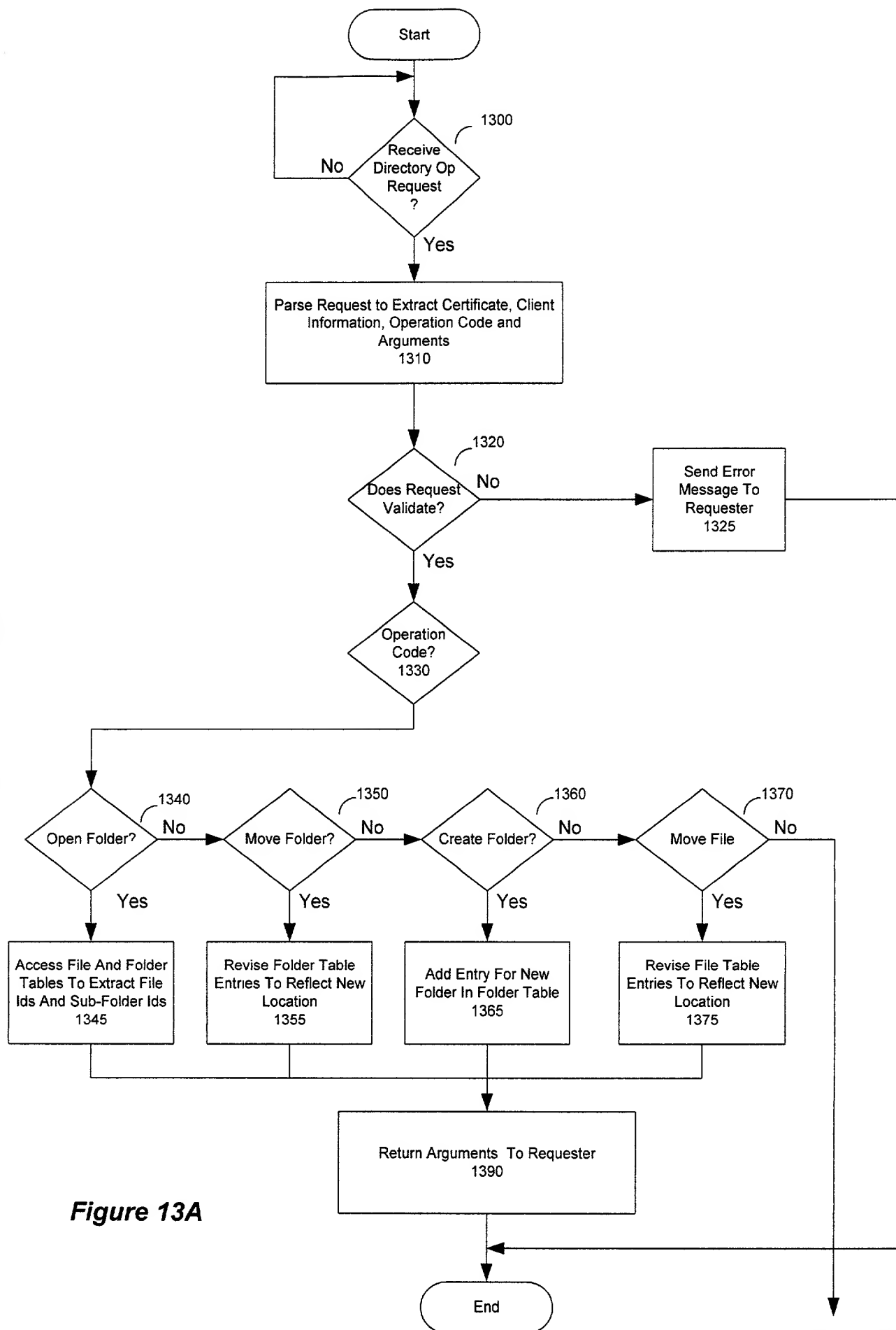
File Table

Customer Id	File Handle	Folder Id	Folder Parent Id	Metadata
3	52.MD5	100	2	[Reserved]
3	55.MD5	100	2	[Reserved]
3	99.MD5	166	251	[Reserved]
3	67.MD5	166	251	[Reserved]

1220

**Figure 12**

FIG. 13A is a flowchart illustrating a process for handling directory operations. The process begins with a 'Start' terminal, leading to a decision diamond 'Receive Directory Op Request?' (1300). If the answer is 'No', the process loops back to the start. If 'Yes', the process proceeds to a process box 'Parse Request to Extract Certificate, Client Information, Operation Code and Arguments' (1310). This leads to another decision diamond 'Does Request Validate?' (1320). If 'No', the process goes to 'Send Error Message To Requester' (1325) and then to the 'End' terminal. If 'Yes', the process proceeds to a decision diamond 'Operation Code?' (1330). This leads to a series of decision diamonds: 'Open Folder?' (1340), 'Move Folder?' (1350), 'Create Folder?' (1360), and 'Move File?' (1370). If 'Open Folder?' is 'Yes', the process goes to 'Access File And Folder Tables To Extract File Ids And Sub-Folder Ids' (1345). If 'Move Folder?' is 'Yes', the process goes to 'Revise Folder Table Entries To Reflect New Location' (1355). If 'Create Folder?' is 'Yes', the process goes to 'Add Entry For New Folder In Folder Table' (1365). If 'Move File?' is 'Yes', the process goes to 'Revise File Table Entries To Reflect New Location' (1375). All these paths lead to a process box 'Return Arguments To Requester' (1390), which then leads to the 'End' terminal. If any of the decision diamonds (1340, 1350, 1360, 1370) are 'No', the process proceeds to the 'End' terminal. A path from the 'No' branch of 'Move File?' (1370) leads to '(To Figure 13B)'.



**Figure 13A**

(To Figure 13B)

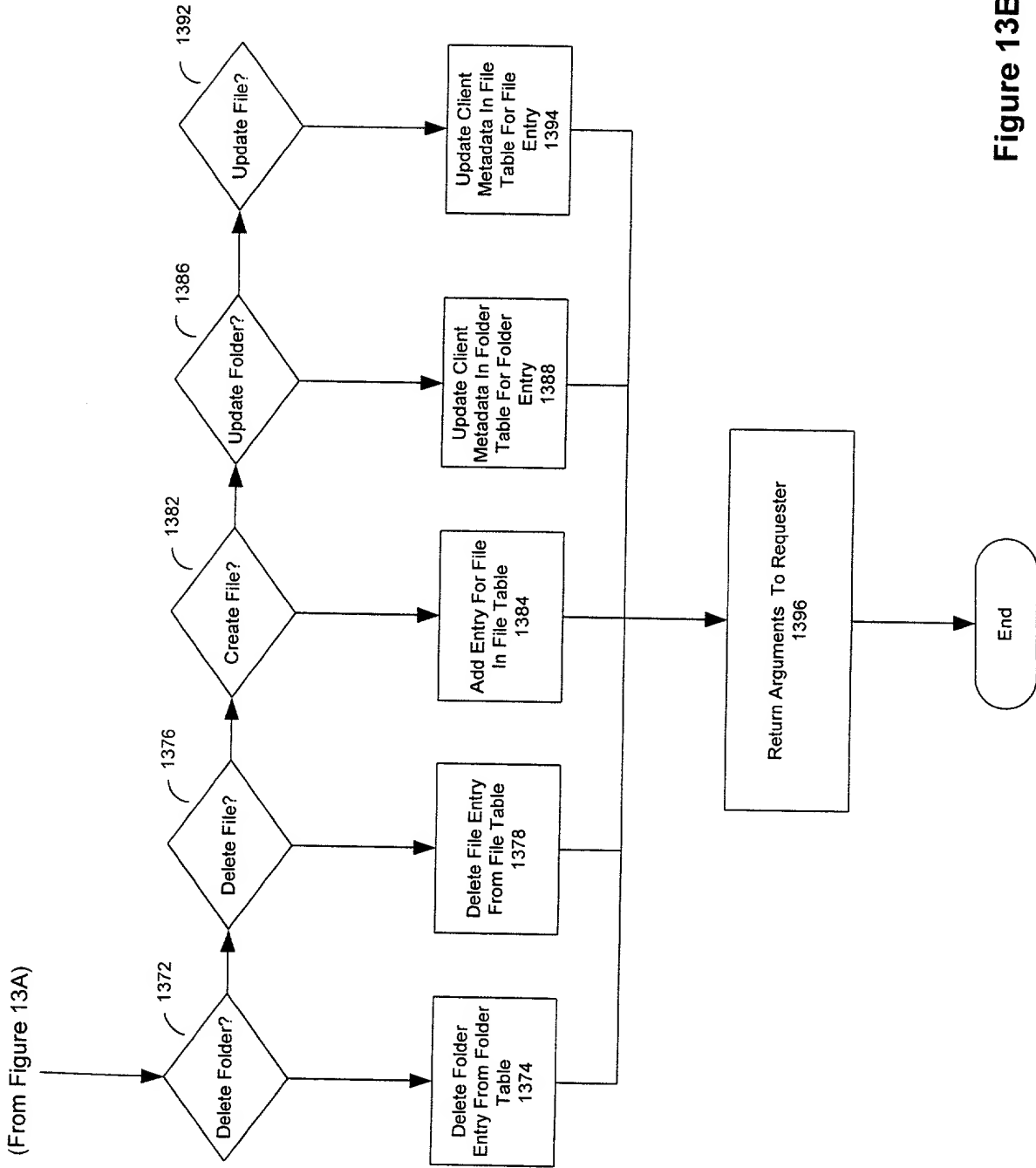
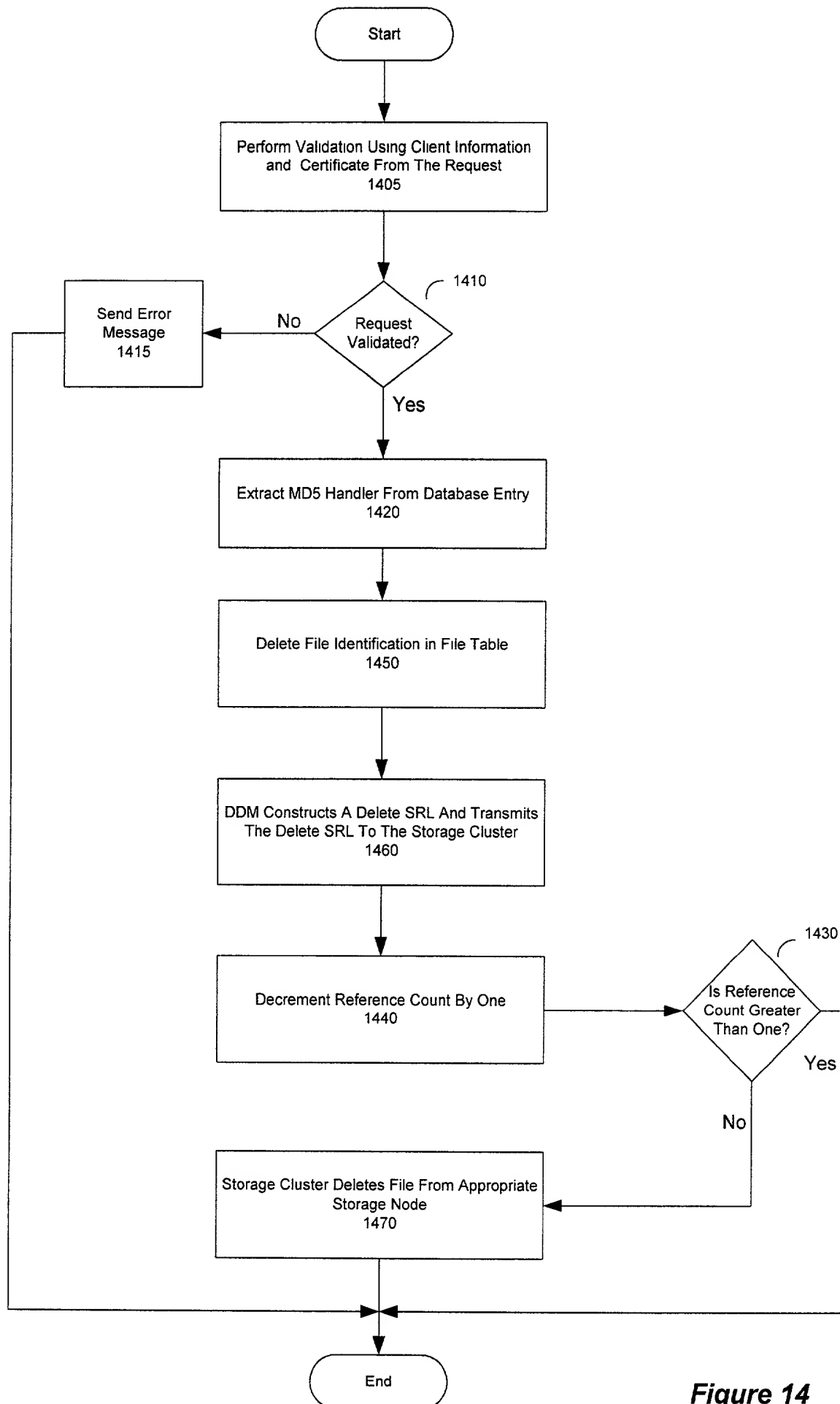
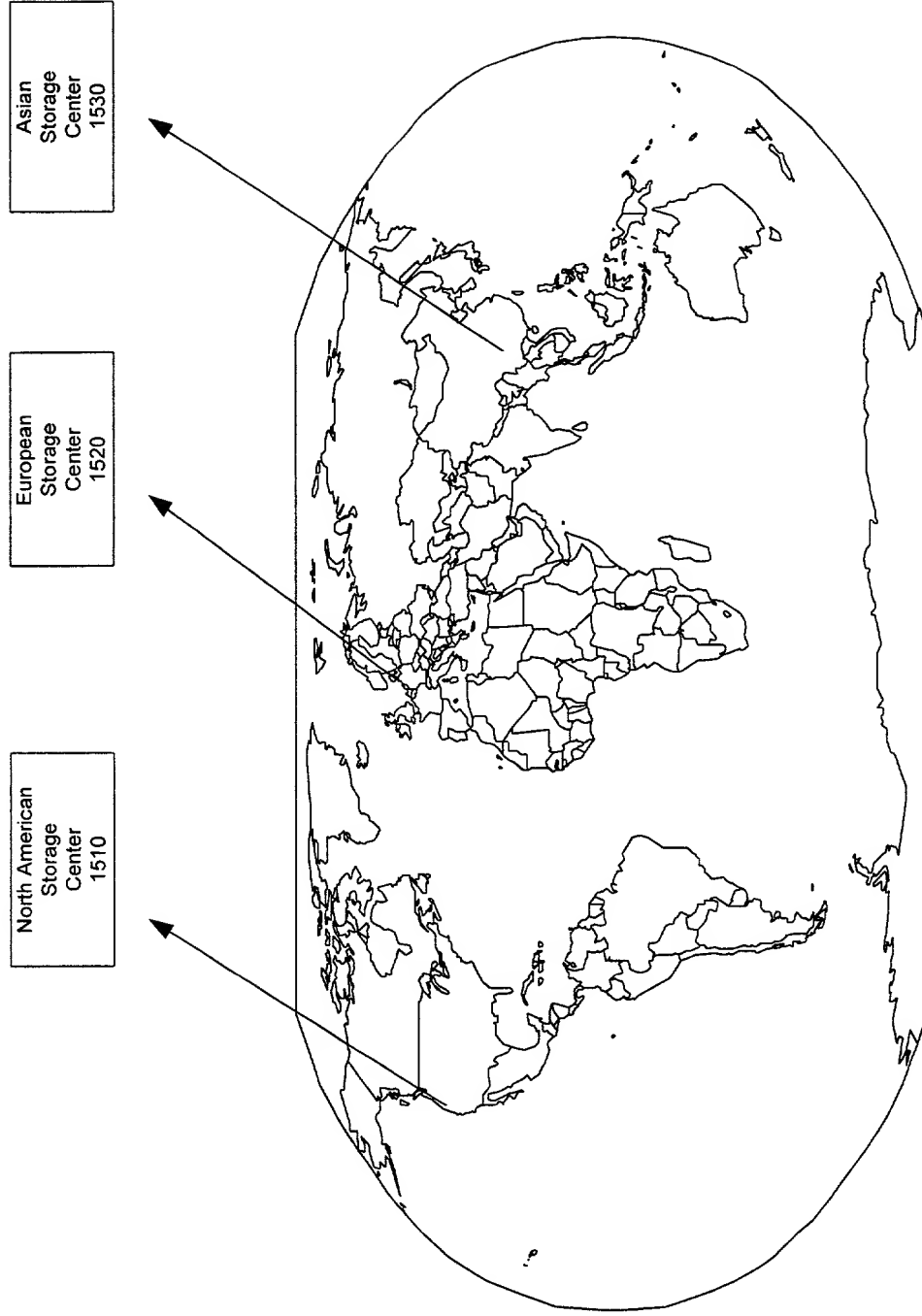


Figure 13B



**Figure 14**



**Figure 15**



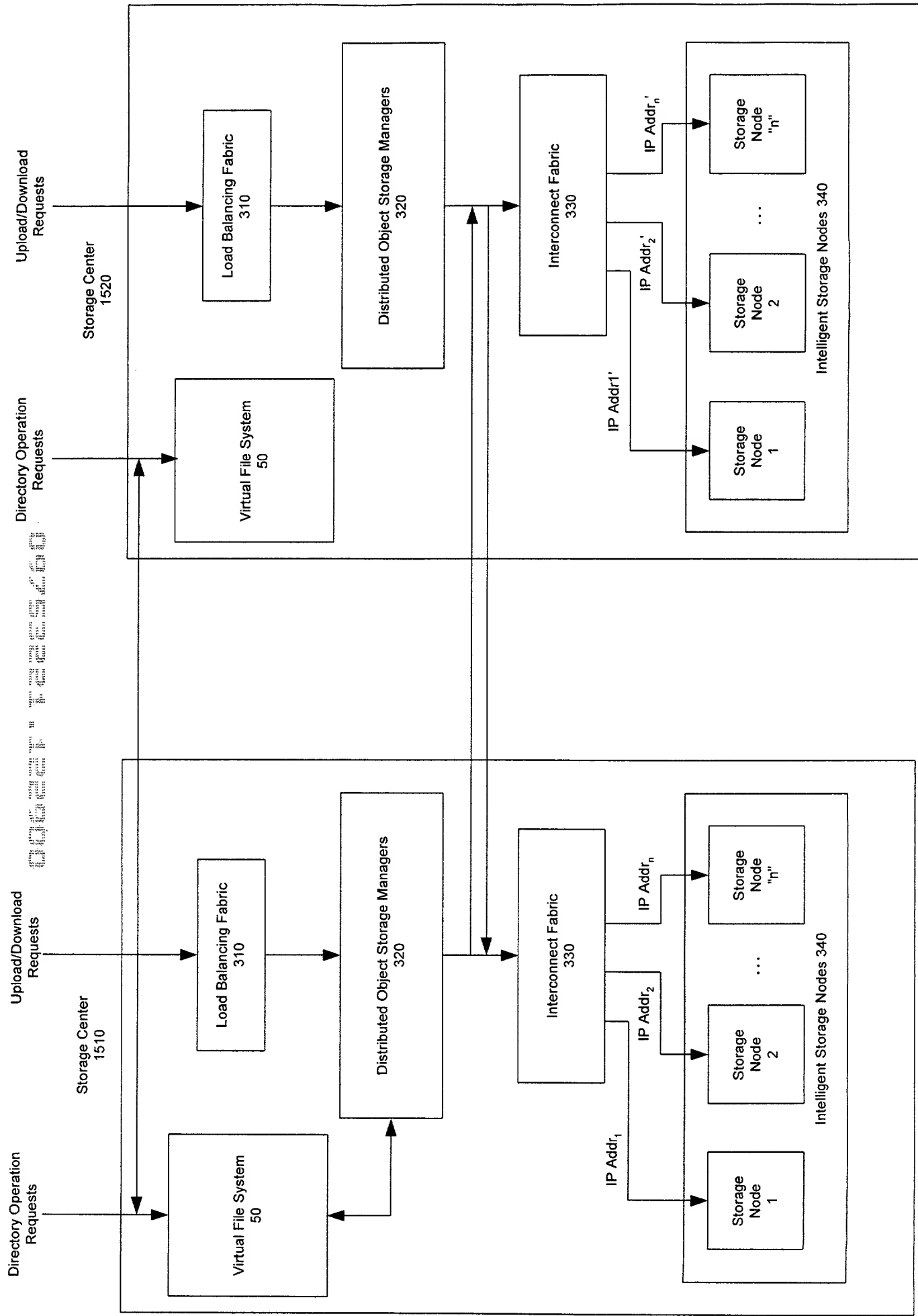


Figure 16

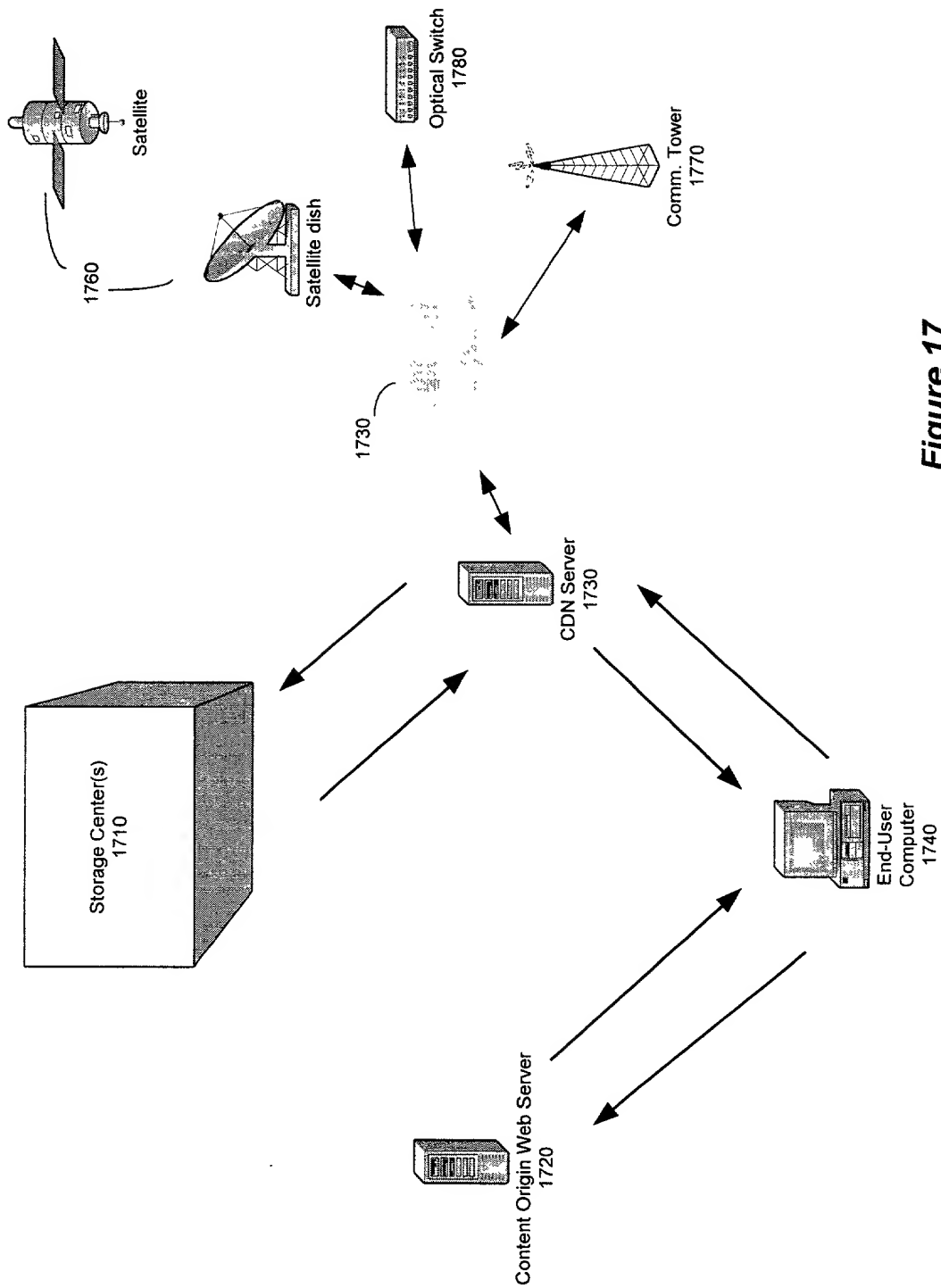
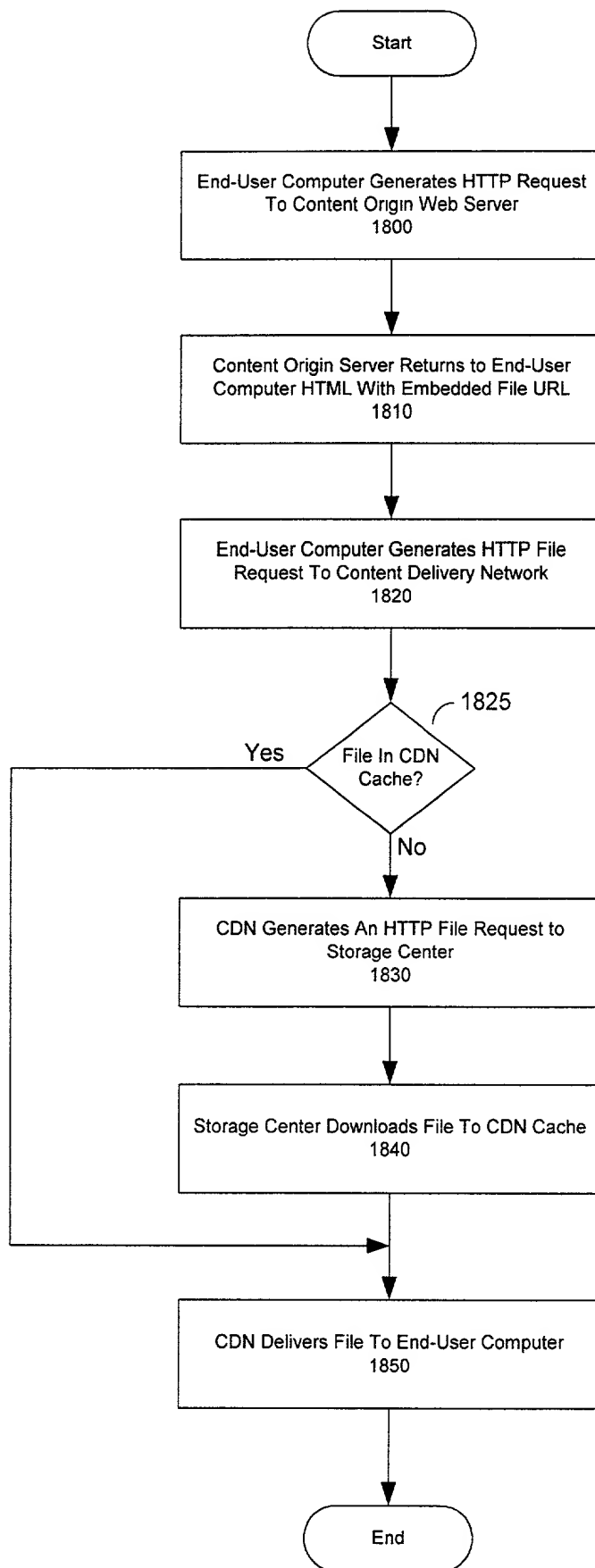
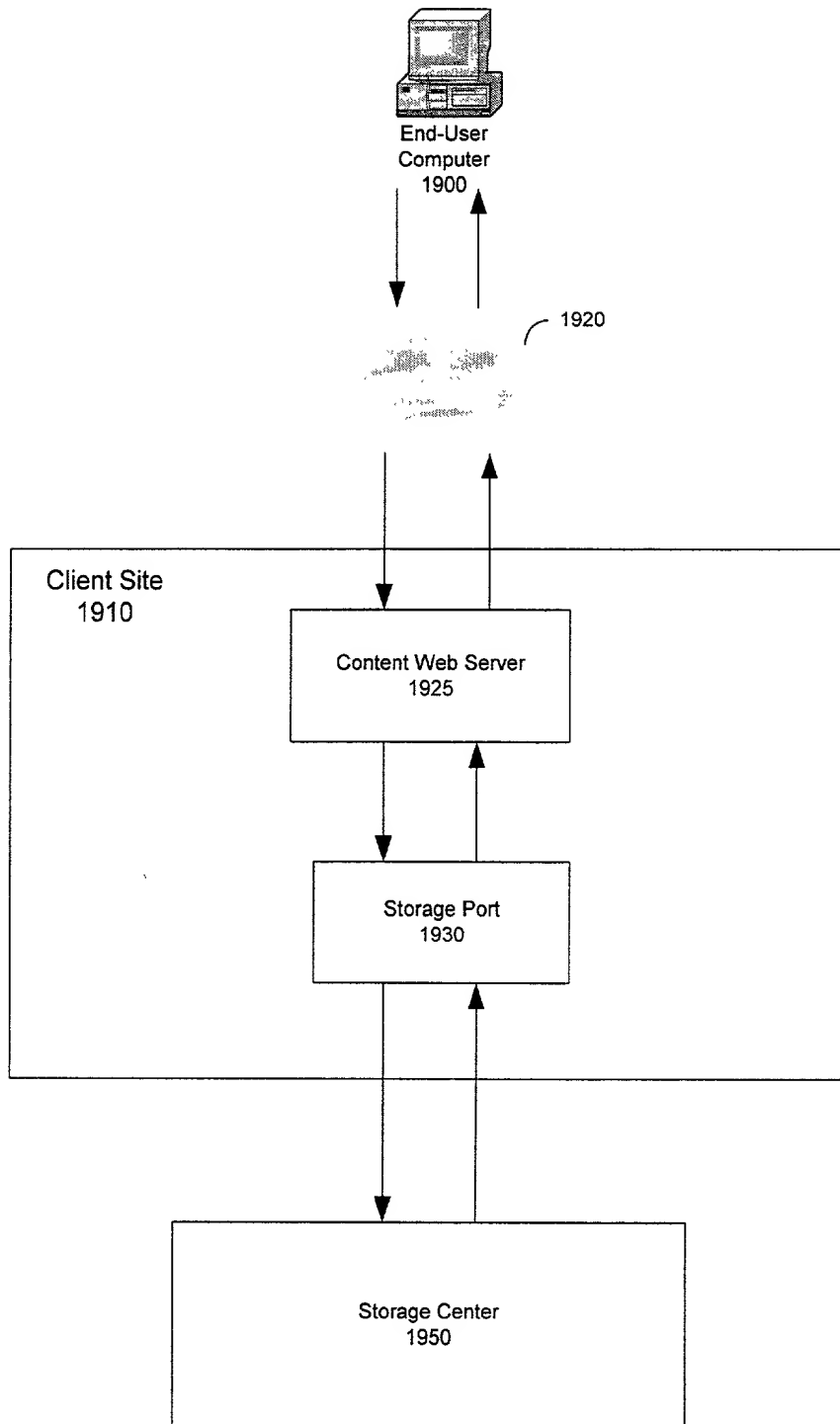


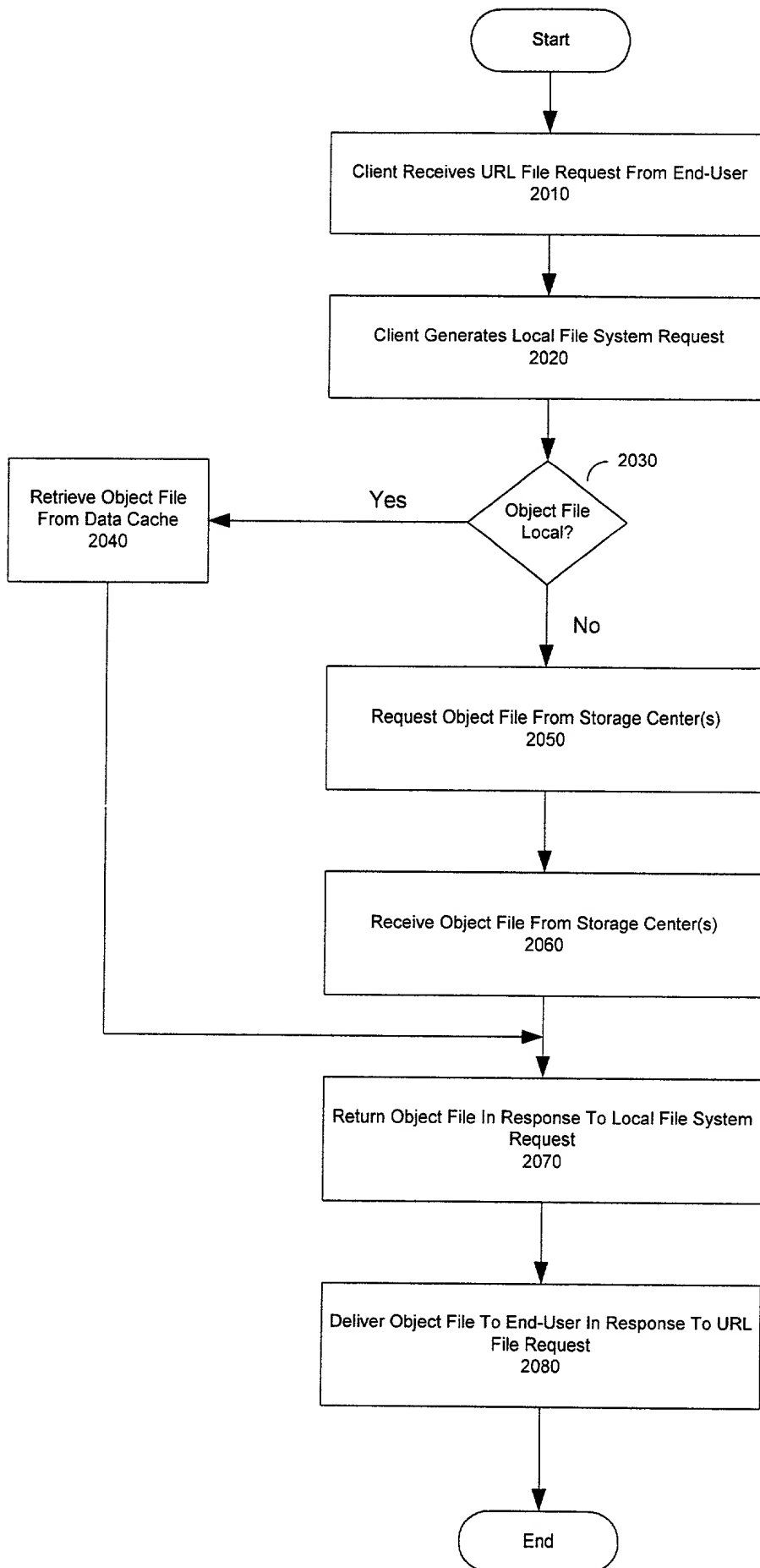
Figure 17



**Figure 18**



**Figure 19**



**Figure 20**

FIG. 21a is a block diagram of a system architecture. The system includes a Content Web Server 2100, a Storage Port 2110, and a Storage Center 2130. The Content Web Server 2100 is connected to the Storage Port 2110 via a lightning bolt symbol 2120. The Storage Port 2110 is connected to the Storage Center 2130 via two arrows, one labeled Directory Operations and one labeled File Operations.

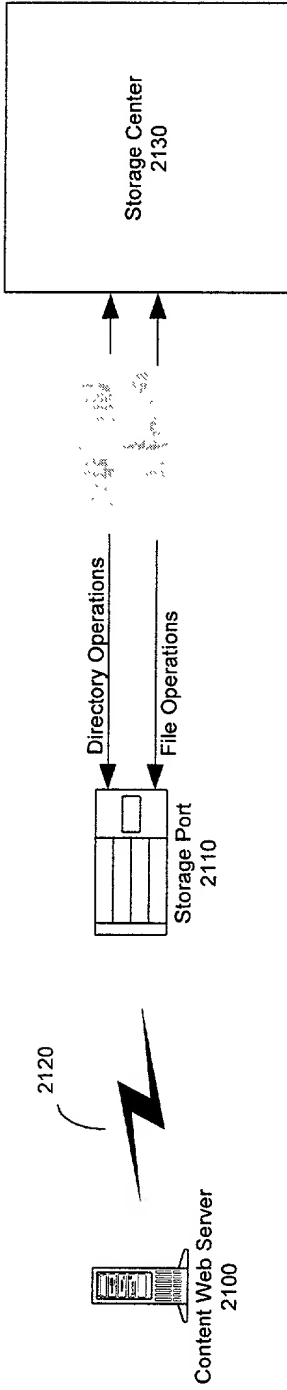


Figure 21a

2150

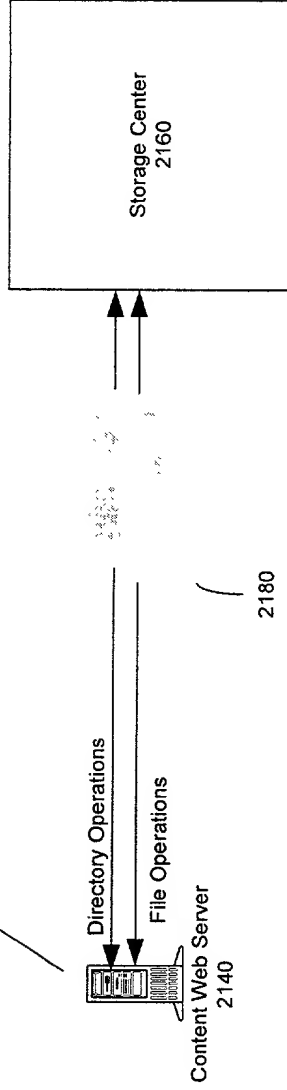
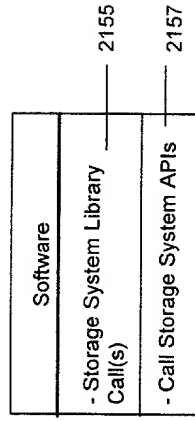


Figure 21b

FIG. 22 is a block diagram of a system architecture. The system includes a Processing Core 2210, Memory 2230, and a Storage Port 2200. The Storage Port 2200 is connected to a Network Interface(s) 2220 and a Storage Port DataStore 2240. The Network Interface(s) 2220 includes Network Interface Card 1, Network Interface Card 2, and Network Interface Card N. The Storage Port DataStore 2240 includes Disk Drive 1 and Disk Drive "n".

Storage Port  
2200

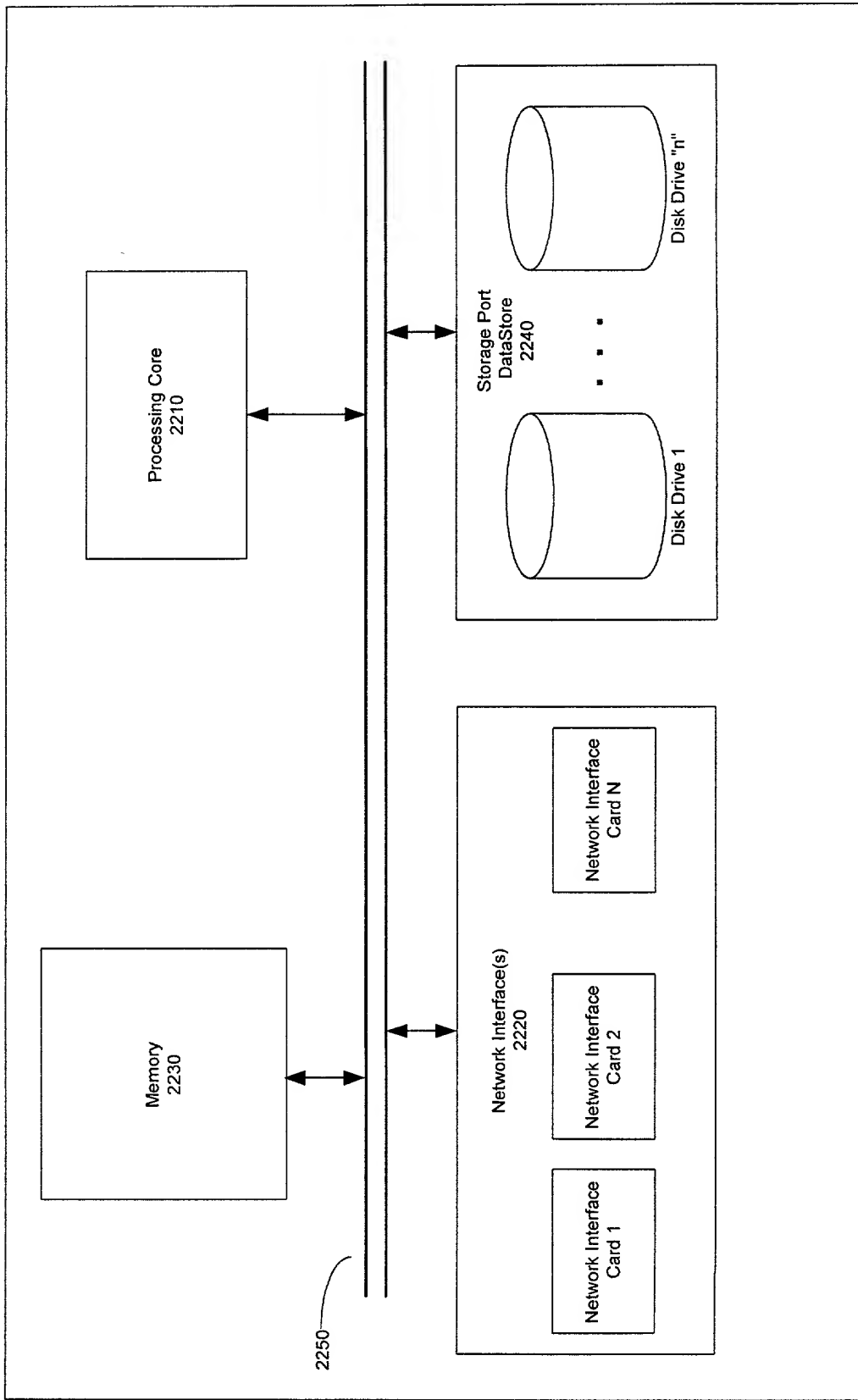
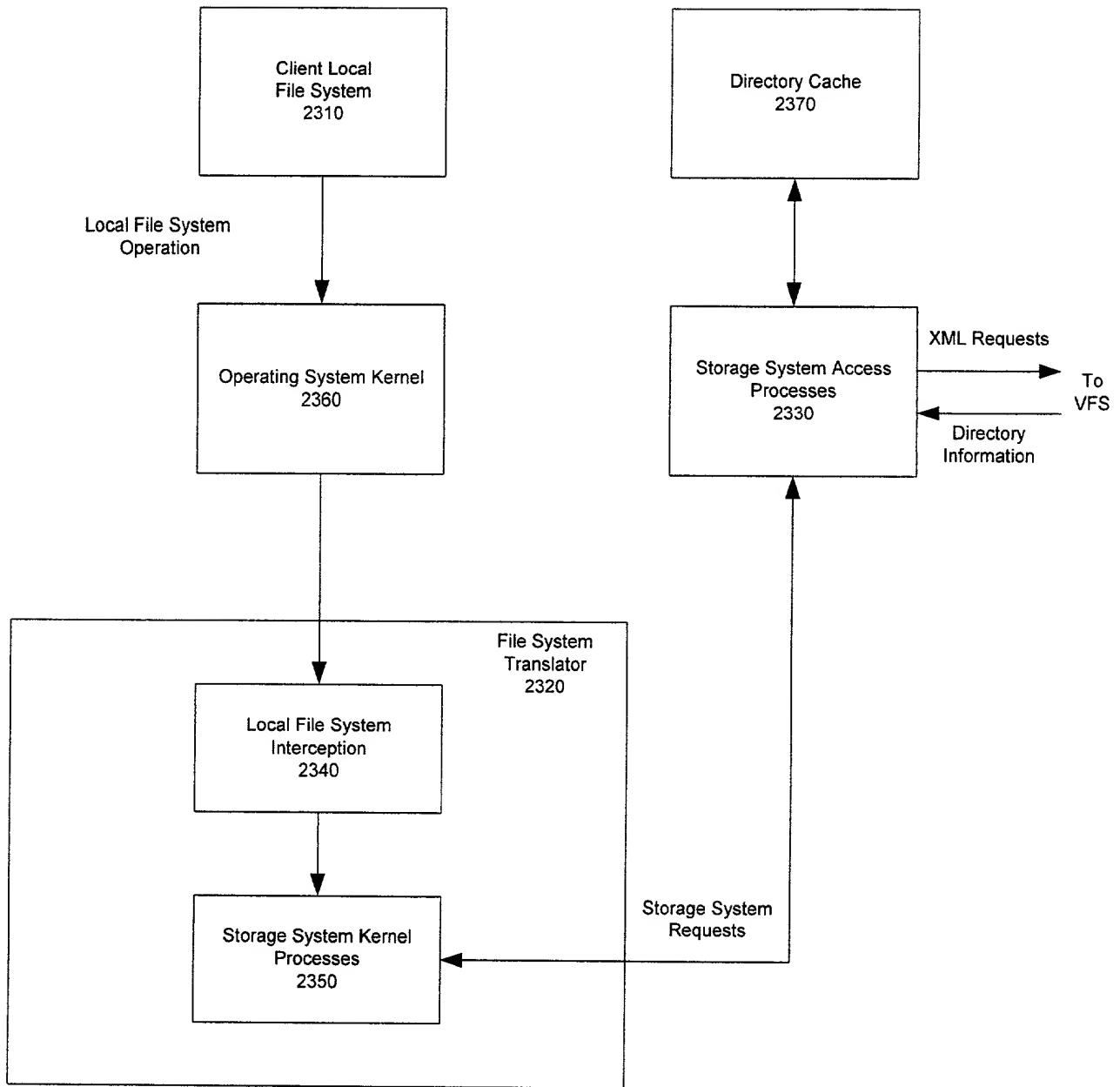


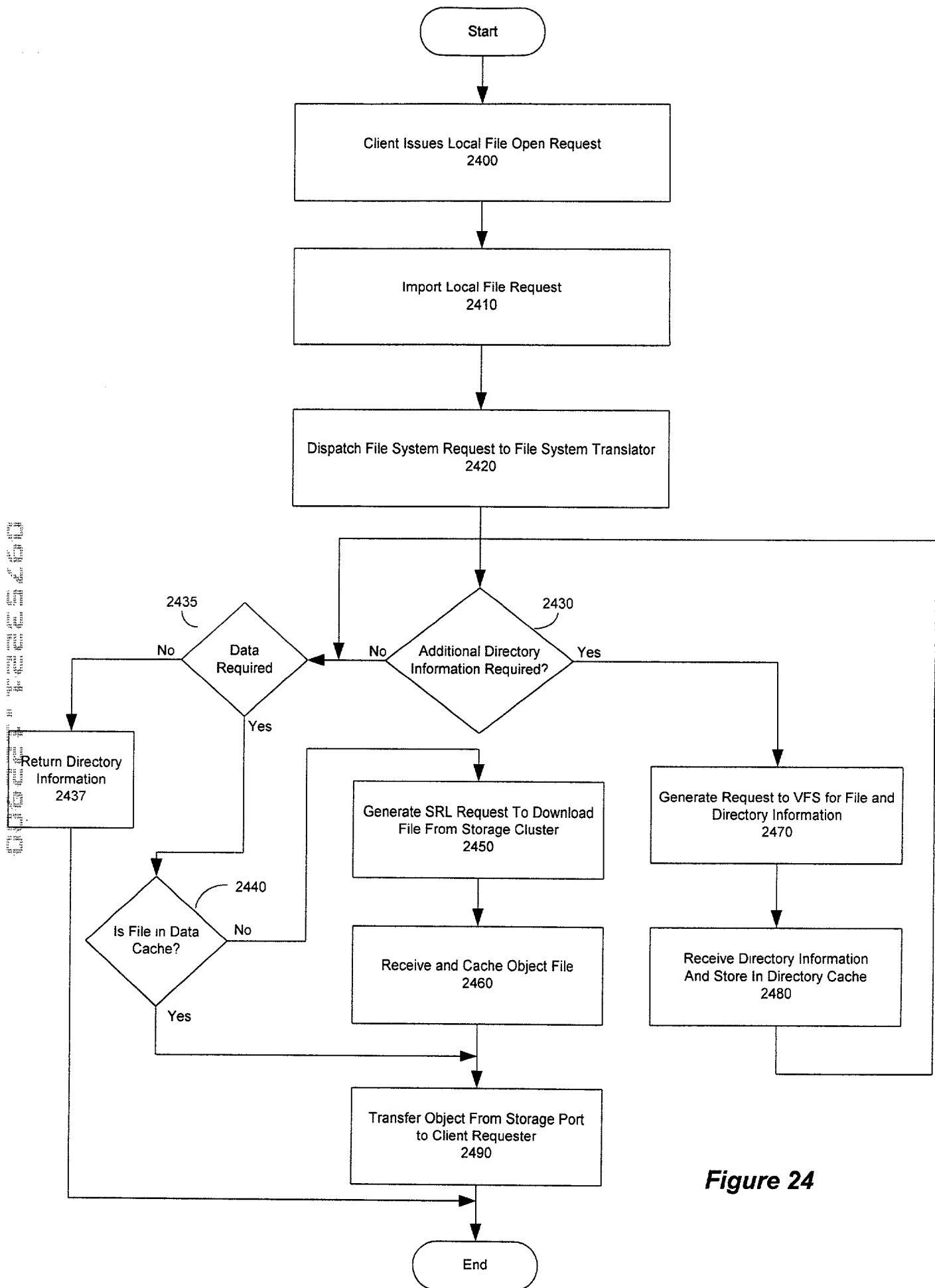
Figure 22

2300

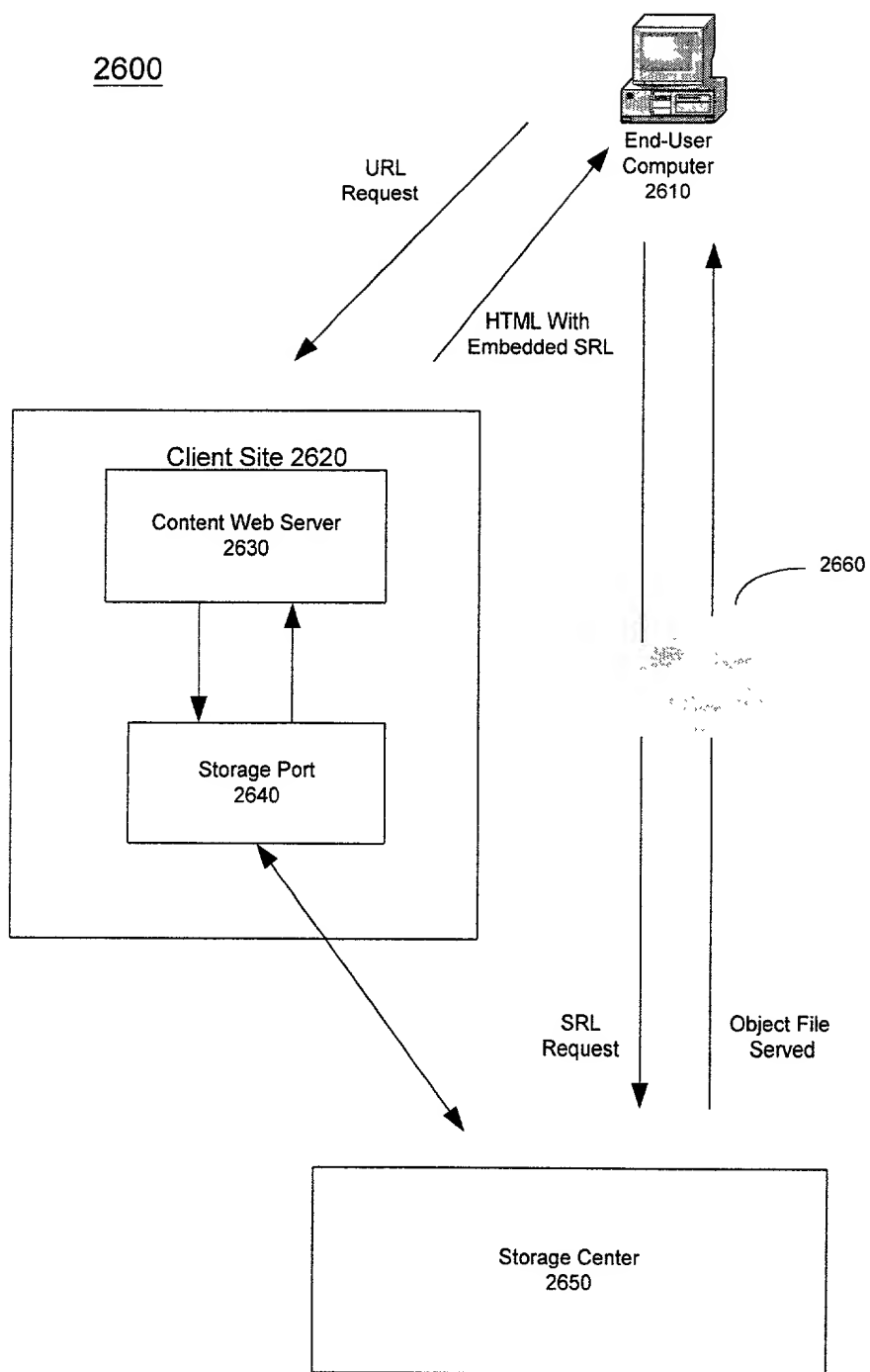


**Figure 23**

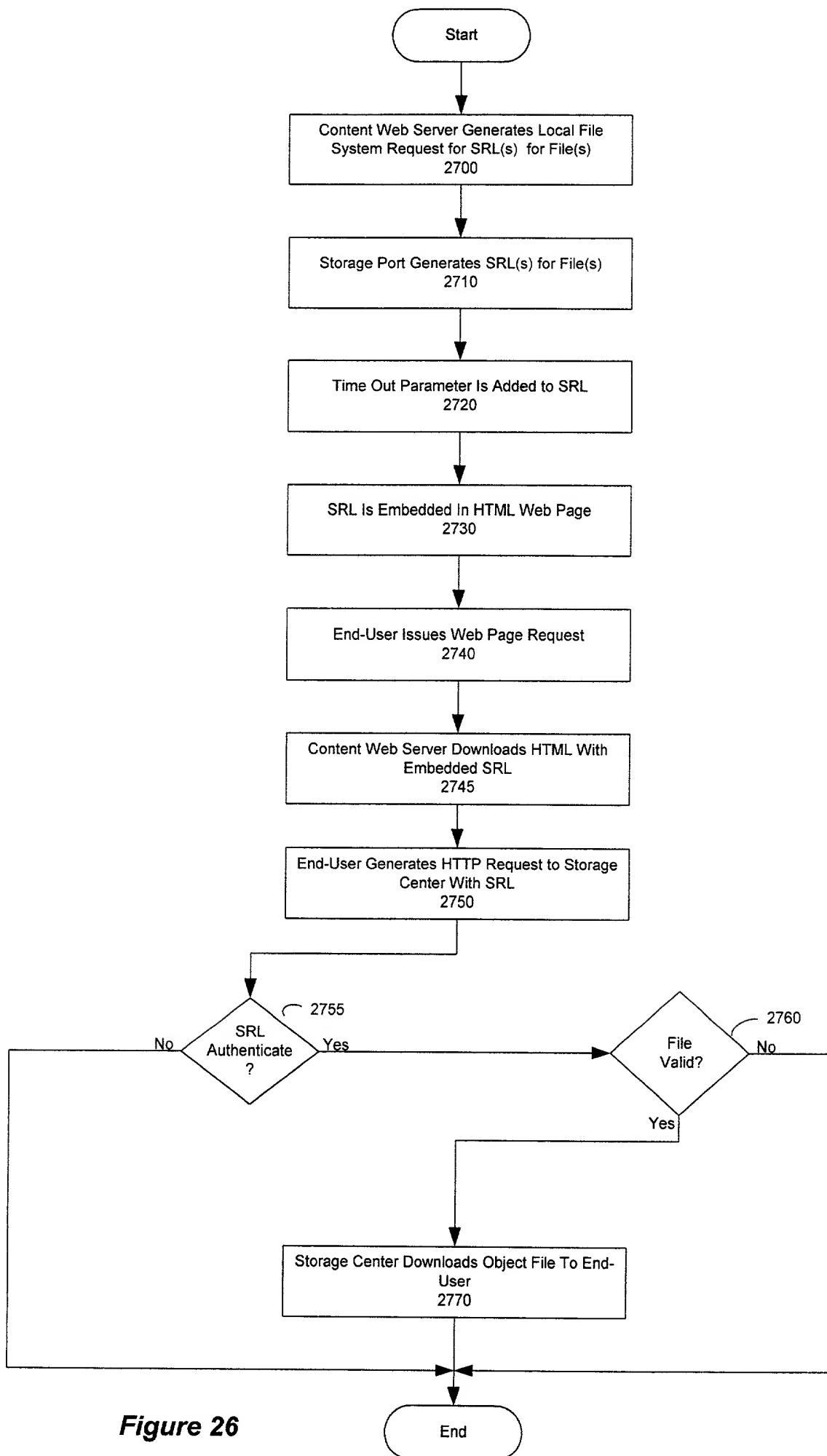




**Figure 24**

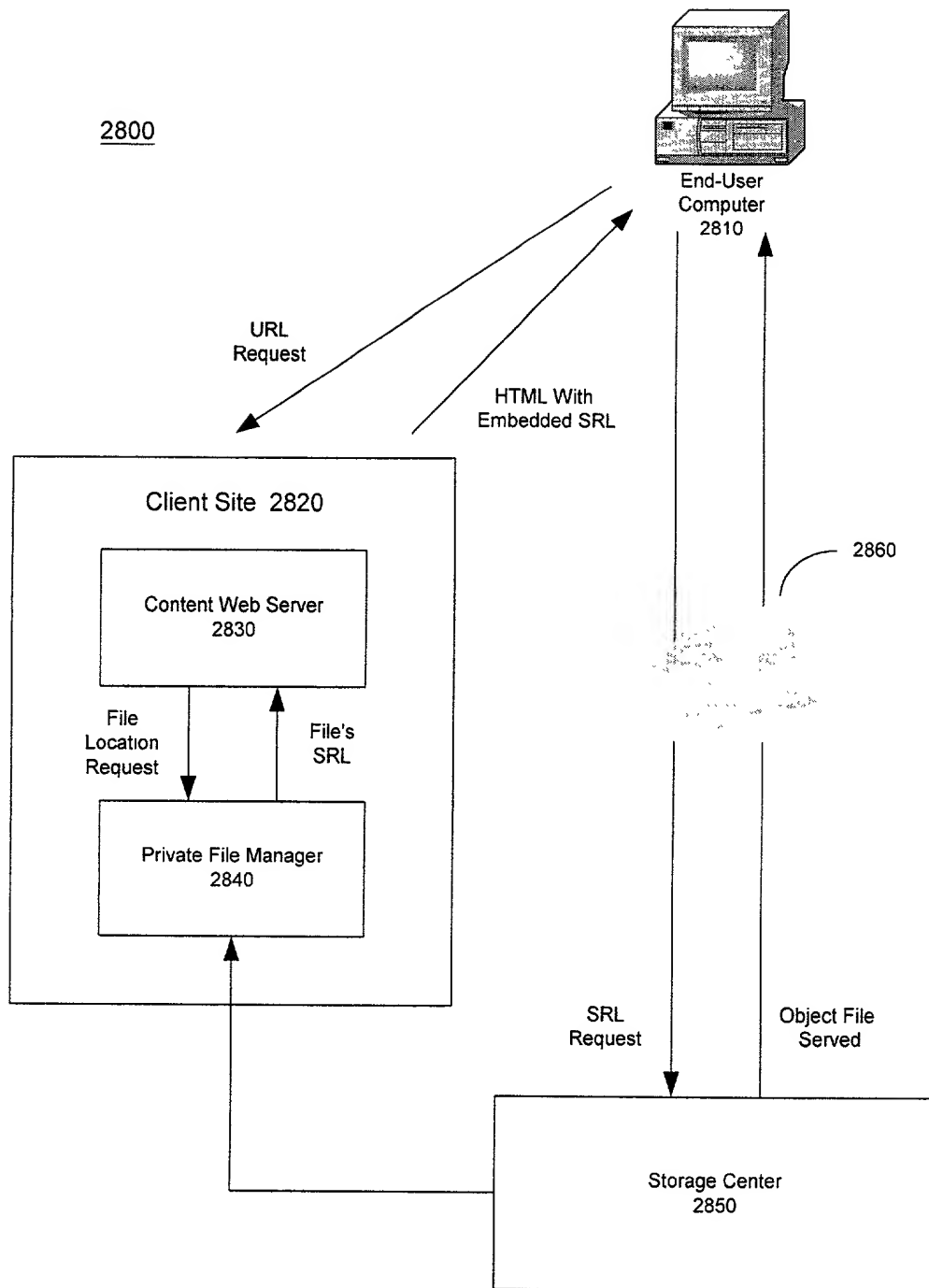


**Figure 25**

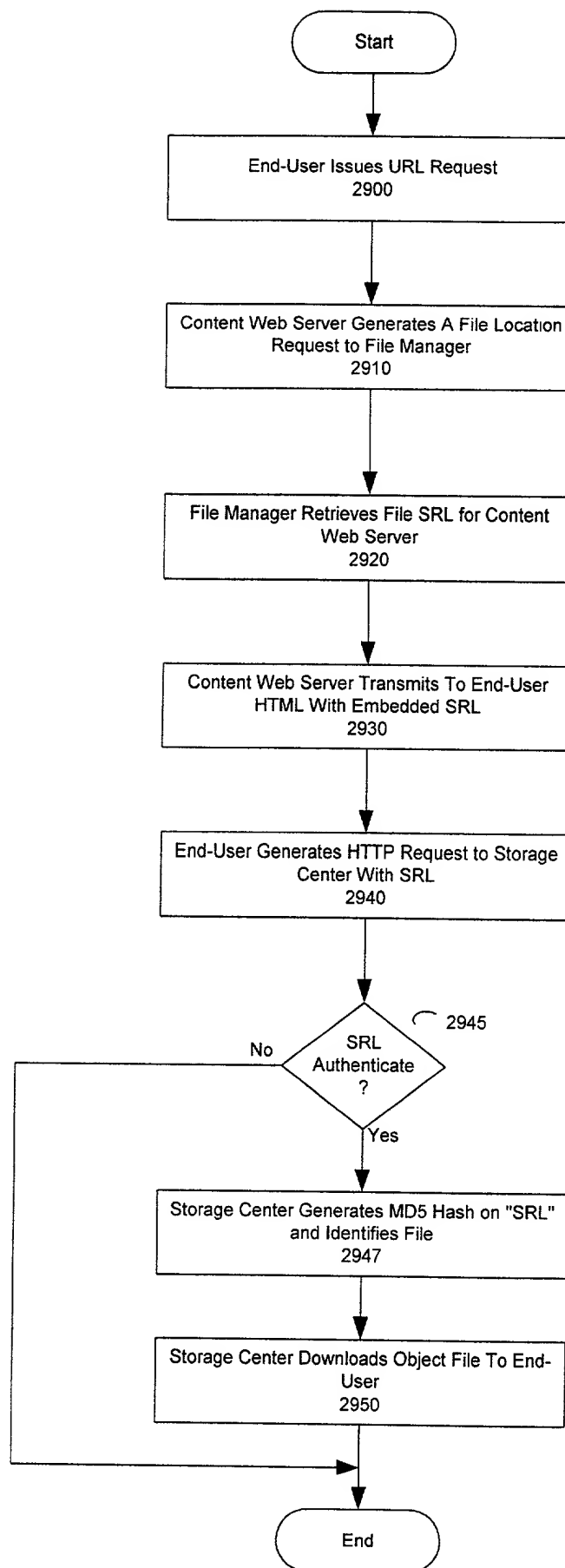


**Figure 26**

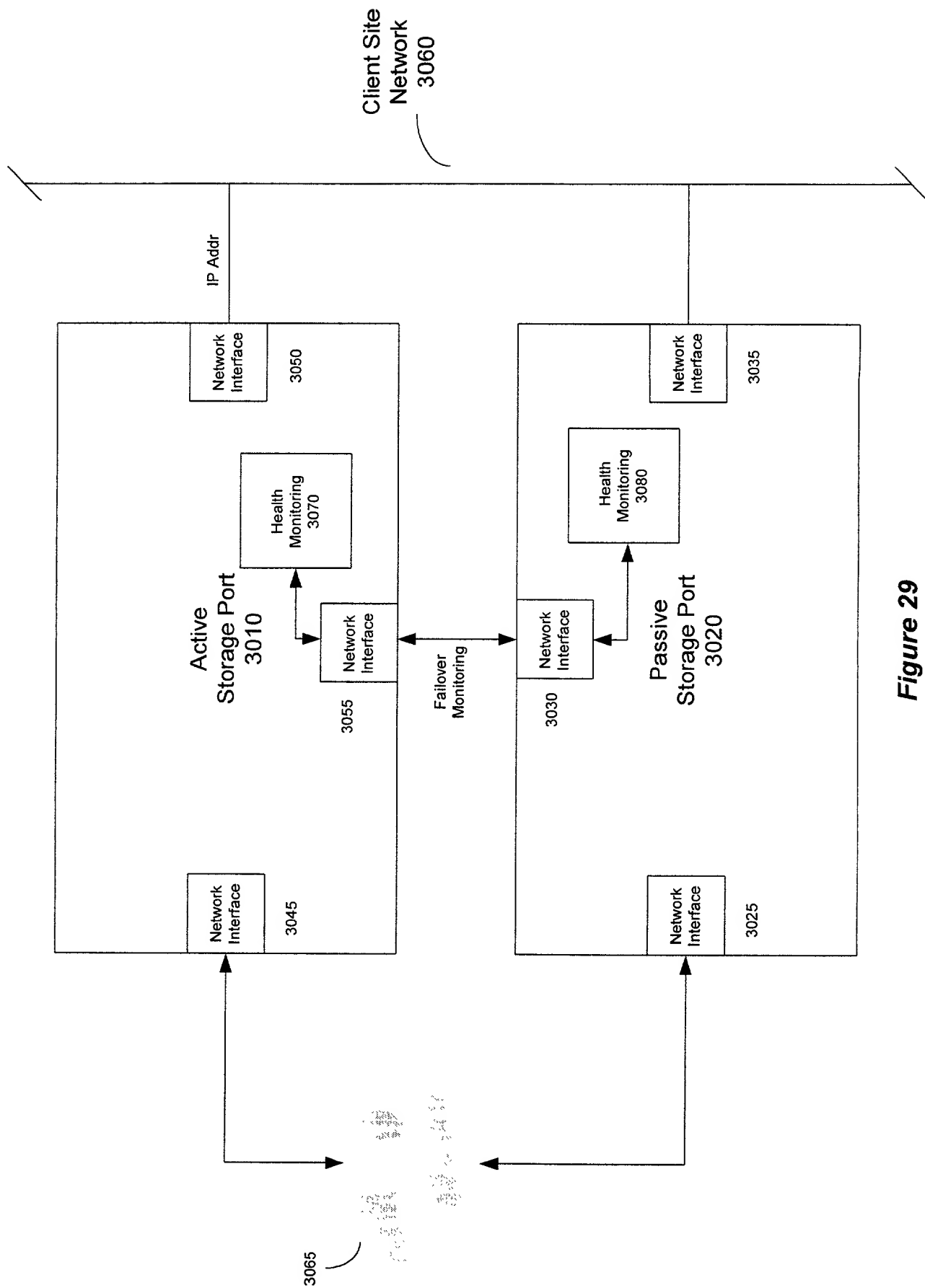
2800

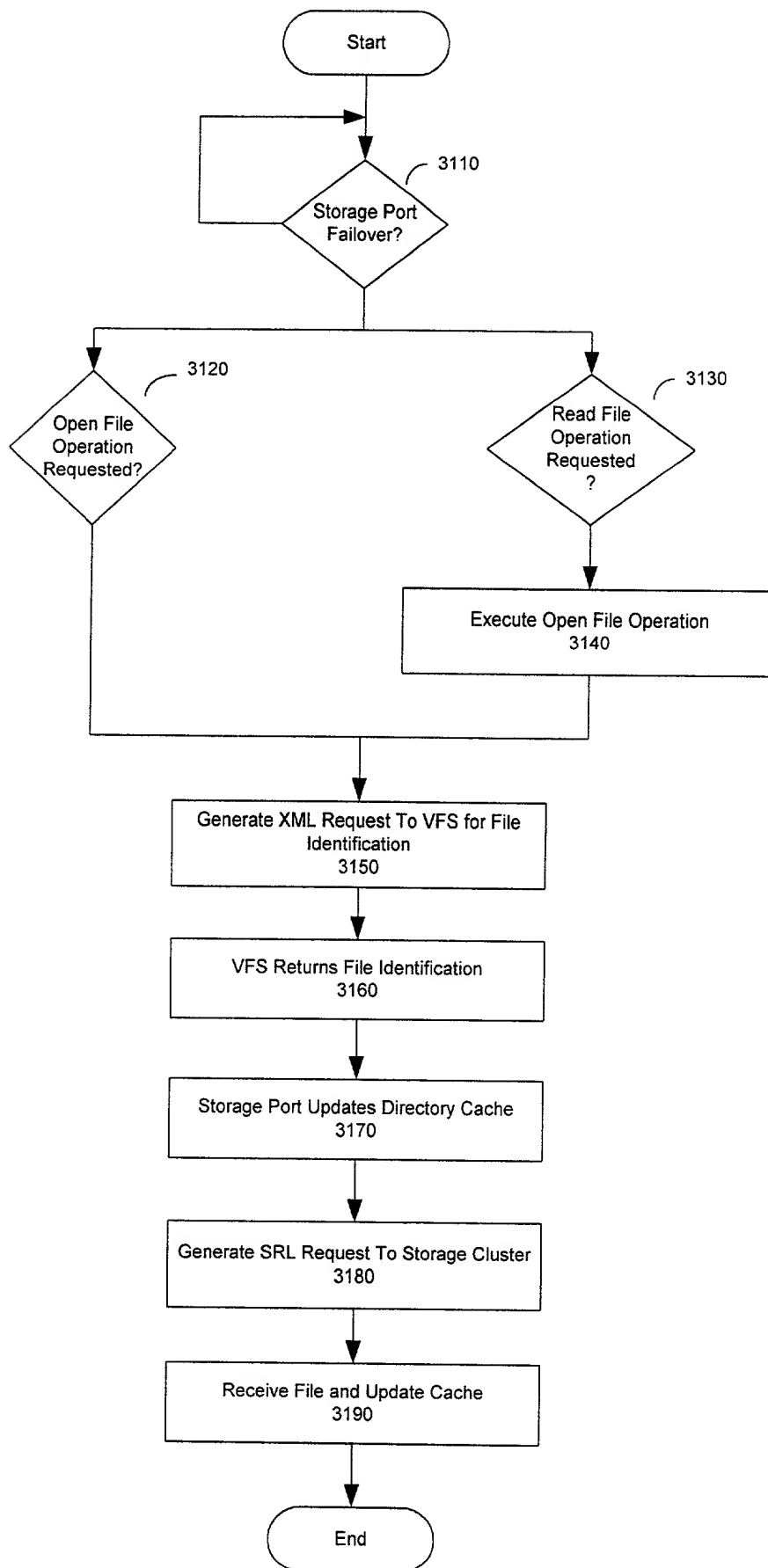


**Figure 27**

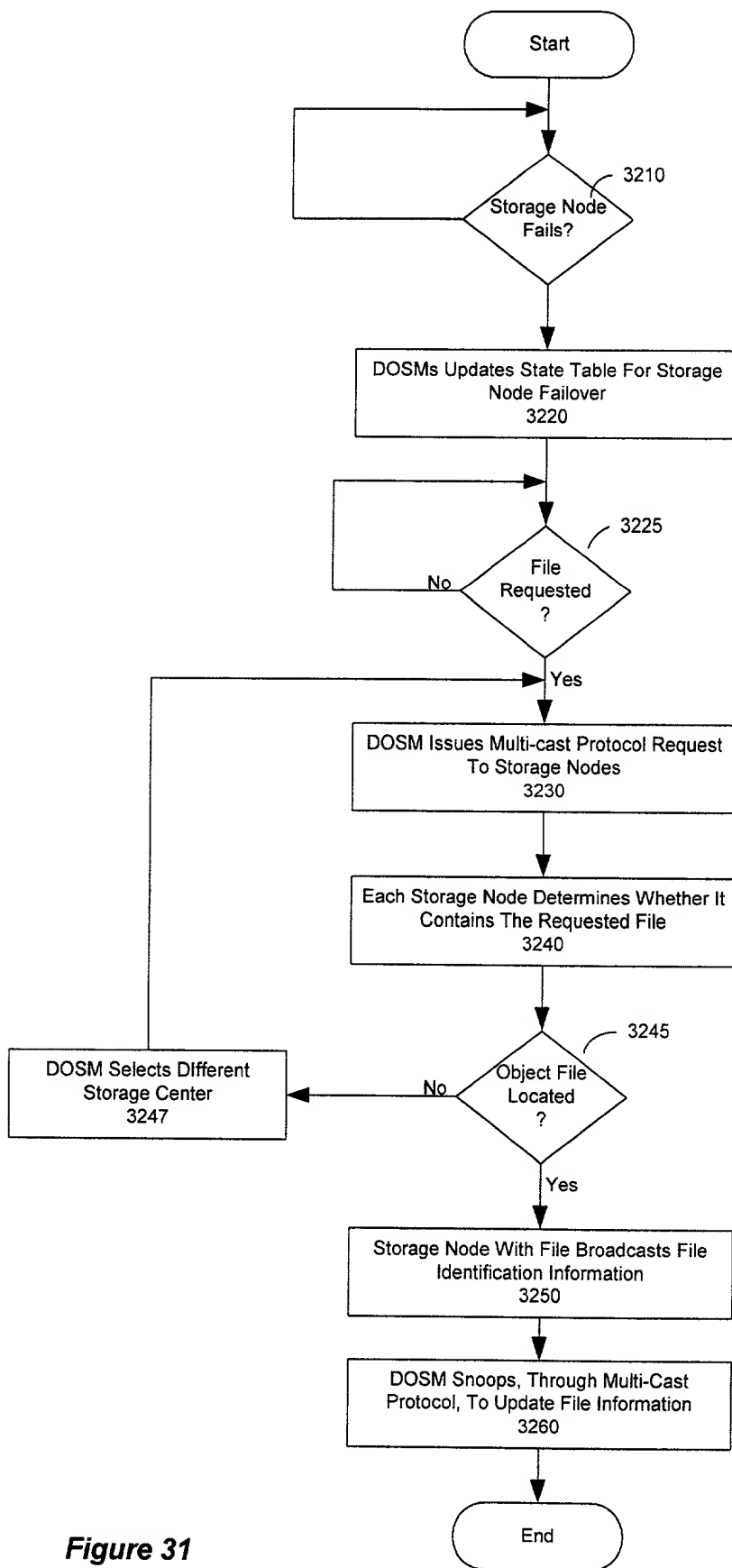


**Figure 28**





**Figure 30**



**Figure 31**